```
Description
Set
        Items
                  AU=(ARNDT, R? OR ARNDT R?)
AU=(MEALEY, B? OR MEALEY B?)
           181
S1
            33
S2
                  AU=(THURBER, S? OR THURBER S?)
            86
S3
           282
                  S1:S3
S4
                  S4 AND IC=G06F
S5
           138
                  PARTITION?
S6
       321675
            40
                  S4 AND S6
S7
                  IDPAT (sorted in duplicate/non-duplicate order)
S8
            40
                  IDPAT (primary/non-duplicate records only)
S9
            36
                  S5 NOT S9
           108
S10
                  S4 AND IC=G06F-017
S11
                  S11 NOT S9
S12
File 347: JAPIO Dec 1976-2005/Dec (Updated 060404)
          (c) 2006 JPO & JAPIO
File 350:Derwent WPIX 1963-2006/UD=200650
(c) 2006 The Thomson Corporation File 349:PCT FULLTEXT 1979-2006/UB=20060803,UT=20060727
          (c) 2006 WIPO/Univentio
File 348:EUROPEAN PATENTS 1978-2006/ 200631
          (c) 2006 European Patent Office
```

# 9/5/1 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0015791631 - Drawing available WPI ACC NO: 2006-348000/200636

XRPX Acc No: N2006-295056

Access management method in computing system, involves forbidding preempt of resource during period set as before

Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC)
Inventor: AMUTT R L; ARMSTRONG W J; BENHATHE M T; BRUNT L C; NAYA N; SU Y C

; ARNOT R L ; BENHASE M T; BLOUNT L C; HSU Y; NAYAR N

Patent Family (2 patents, 2 countries)

Patent Application

Number Kind Date Update Number Kind Date A 20051027 В 200636 JP 2006127524 Α 20060518 JP 2005313466 20060727 US 2004977800 A 20041029 200650 US 20060168214 A1

Priority Applications (no., kind, date): US 2004977800 A 20041029

## Patent Details

Number Kind Lan Pg Dwg Filing Notes JP 2006127524 A JA 17 6

## Alerting Abstract JP A

NOVELTY - The period set is permitted when forcible exclusion of use of a resource by a **partition** is not carried out by the hyper-visor. The preempt of the resource is forbidden during the period set and the reference communication is accelerated so that the input of a guarantee period is accelerated in **partition**.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.access management apparatus; and
- 2.access management program.

USE - In computing system.

ADVANTAGE - The access management with respect to the resource contained in the data processing environment is improved.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the main software components of the computer and a resource. (Drawing includes non-English language text).

- 12 system processor
- 42 partition (A)
- 44 partition (B)
- 46 hyper-visor
- 49 control unit

Title Terms/Index Terms/Additional Words: ACCESS; MANAGEMENT; METHOD; COMPUTATION; SYSTEM; FORBID; RESOURCE; PERIOD; SET

## Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0009/46 A I L B 20060101

G06F-0009/50 A I F B 20060101

G06F-0015/16 A I F B 20060101

G06F-0015/173 A I L B 20060101

G06F-0009/46 C I F B 20060101

G06F-0015/16 C I L B 20060101

US Classification, Issued: 709225000, 709200000, 709219000

File Segment: EPI; DWPI Class: T01

9/5/2 (Item 2 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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0015626402

WPI ACC NO: 2006-190579/200620

XRPX Acc No: N2006-163945

Logically partitioned data processing system has hypervisor providing set of services comprising service for creating new translation table for mapping change in logical address to physical address without modifying existing table

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNDT R L

Patent Family (1 patents, 1 countries)
Patent Application

Number Kind Date Number Kind Date Update Us 7003771 B1 20060221 US 2000589663 A 20000608 200620 B

Priority Applications (no., kind, date): US 2000589663 A 20000608

Patent Details

Number Kind Lan Pg Dwg Filing Notes

US 7003771 B1 EN 12 6

# Alerting Abstract US B1

NOVELTY - A hypervisor provides a set of services comprising a service for creating a new translation table for mapping a change in a logical address to a physical address without modifying existing table, to each of multiple logical partitions. One of the services perform modifications to non-assignable resource, in response an operating system request to directly access non-assignable resource, without allowing direct access. DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.method for protecting integrity of logically partitioned data processing system;
- 2.method for providing modification of system resources by operating system within logically partitioned data processing system;
- 3.computer program product for protecting integrity of logically partitioned data processing system;
- 4.computer program product for providing modification of system resources by operating system within logically partitioned data processing system;
- 5.system for protecting integrity of logically partitioned data processing system; and
- 6.system for providing modification of system resources by operating system within logically partitioned data processing system.

USE - For use in distributed data processing system.

ADVANTAGE - Prevents each of several operating systems from interfering with the operation of other operating system.

with the operation of other operating system.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the logically partitioned platform.

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION; DATA; PROCESS; SYSTEM; SET; SERVICE; COMPRISE; NEW; TRANSLATION; TABLE; MAP; CHANGE; ADDRESS; PHYSICAL; MODIFIED; EXIST

## Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version
 G06F-0009/46 A I F B 20060101
US Classification, Issued: 718104000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05E; T01-H01A; T01-J17; T01-S03

(Item 3 from file: 350) 9/5/3

DIALOG(R) File 350: Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0015589337 - Drawing available WPI ACC NO: 2006-153502/200616

XRPX Acc No: N2006-132626

Implementation method for trusted computing environment, involves swapping contexts of logical partitions into and out of trusted platform module during system runtime, when one partition requires access to trusted platform module

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNOT R L ; BADE S A; DEWKETT T J; GAINEY C W; KELLEY N L;

SUTTER S; WEBER H H

1 countries) Patent Family (1 patents,

Application

Kind Date Update Number Date Number Kind 20040729 US 20060026419 A1 20060202 US 2004902670 Α 200616 B

Priority Applications (no., kind, date): US 2004902670 A 20040729

## Patent Details

Рg Dwg Filing Notes Kind Lan Number US 20060026419 A1 EN 17

Alerting Abstract US A1

NOVELTY - The logical partitions in a data processing system are respectively and simultaneously associated with the context storage slots in a hardware trusted platform module (300). The contexts of the logical partitions are swapped into and out of the hardware trusted platform module during runtime of the data processing system, when one of the partitions requires access to the trusted platform module.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.an apparatus for implementing a trusted computing environment; and
- 2.a computer program product.

USE - Use for implementing a trusted computing environment within a data processing system.

ADVANTAGE - Permits scaling of the partitionable environment by providing a scalable hardware trusted platform module that provide trust to a scalable number of partitions that require trust and that are currently supported by the environment.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the modified trusted platform module.

300 Trusted platform modules

Title Terms/Index Terms/Additional Words: IMPLEMENT; METHOD; COMPUTATION; ENVIRONMENT; CONTEXT; LOGIC; PARTITION; PLATFORM; MODULE; SYSTEM; ONE; REQUIRE; ACCESS

## Class Codes

International Classification (+ Attributes) IPC + Level Value Position Status Version H04L-0009/00 A I F B .20060101 US Classification, Issued: 713150000

File Segment: EPI; DWPI Class: T01; W01

Manual Codes (EPI/S-X): T01-F05G; T01-J12C1; T01-S03; W01-A05B

#### 9/5/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0015589295 - Drawing available WPI ACC NO: 2006-153460/200616

XRPX Acc No: N2006-132584

Logical partitioned data processing system controls input/output unit data flow operations using traffic class mechanism in conjunction with virtual channel resources and relax ordering mechanism

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: ARNDT R L ; BUCKLAND P A; NORDSTROM G M; THURBER S M

Patent Family (1 patents, 1 countries)

Application Patent

Date ' Number Kind Date Number Kind A 20040729 US 20060026327 A1 20060202 US 2004902611 200616 B

Priority Applications (no., kind, date): US 2004902611 A 20040729

#### Patent Details

Kind Lan Pg Dwg Filing Notes Number US 20060026327 Α1 EN

## Alerting Abstract US A1

NOVELTY - A host bridge differentiates and controls input/output unit data flow operations using traffic class mechanism in conjunction with virtual channel resources and a relaxed ordering.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.method for controlling input/output unit data flow operations;
- 2.apparatus for controlling input/output unit data flow operations; and
- 3.computer program product for controlling input/output unit data flow operations.

USE - For controlling input/output adapter data flow operations in logical partitioned (LPAR) data processing system. ADVANTAGE - Differentiation of data flows by relaxed ordering (RO) bits helps in eliminating bottlenecks and provide improved system performance. DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the logical partitioned data processing system.

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION ; DATA; PROCESS ; SYSTEM; CONTROL; INPUT; OUTPUT; UNIT; FLOW; OPERATE; TRAFFIC; CLASS; MECHANISM; CONJUNCTION; VIRTUAL; CHANNEL; RESOURCE; RELAX; ORDER

# Class Codes

International Classification (+ Attributes) IPC + Level Value Position Status Version G06F-0013/36 A I F B 20060101 US Classification, Issued: 710306000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-H05B2; T01-S03

9/5/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.

0015551292 - Drawing available WPI ACC NO: 2006-115446/200612

XRPX Acc No: N2006-099882

Method for associating reliable datagram queue pairs with end-to-end context in storage area network, involves storing reliable datagram domain within reliable datagram queue pair content and end-to-end context

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: NEAL D M; RECIO R J; THURBER S M
Patent Family (1 patents, 1 countries)
Patent Application

Number Kind Date Number Kind Date Update
US 6990528 B1 20060124 US 2000692354 A 20001019 200612 B

Priority Applications (no., kind, date): US 2000692354 A 20001019

### Patent Details

Number Kind Lan Pg Dwg Filing Notes US 6990528 B1 EN 15 10

## Alerting Abstract US B1

NOVELTY - A reliable datagram domain (RDD) is stored within a reliable datagram queue pair (RDQP) context, and an end-to-end context (EEC) comprising a partition key (P-key). The partition key of incoming data packet (810) and the partition key of EEC are compared. The RDDs of RDQP and EEC are compared, if the partition keys match, and the packets are processed normally based on the comparison result.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.computer program product for associating reliable datagram queue pairs with underlying end-to-end context of channel adapter; and
- 2.system for associating reliable datagram queue pairs with underlying end-to-end context of channel adapter.

USE - For associating reliable datagram queue pairs with underlying end-to-end context of channel adapter in storage area network (SAN).

ADVANTAGE - Allows reliable datagram queue pairs to be used for communicating across multiple partitions, and eliminates the need to check partition keys for queue pairs (QP) and end-to-end context separately.

DESCRIPTION OF DRAWINGS - The figure shows a schematic diagram of the SAN reliable datagram queue pairs associated with end-to-end contexts.

802,816 reliable data gram domain

806 end-to-end context

810 packets

814 P-key

818 send queue

Title Terms/Index Terms/Additional Words: METHOD; ASSOCIATE; RELIABILITY; OUEUE; PAIR; END; CONTEXT; STORAGE; AREA; NETWORK; DOMAIN; CONTENT

## Class Codes

International Classification (+ Attributes)
IPC + Level Value Position Status Version
 G06F-0015/16 A I F B 20060101
US Classification, Issued: 709232000, 709204000, 709205000, 709206000,
 709207000, 709212000, 709222000, 709223000, 709231000, 709236000,
 709237000, 709250000, 713152000, 713153000, 713160000, 713161000,
 713164000, 713189000, 713200000, 713201000, 710039000, 710040000

File Segment: EPI;
DWPI Class: T01; W01
Manual Codes (EPI/S-X): T01-N02A2D; T01-S03; W01-A03B; W01-A06G2

## 9/5/6 (Item 6 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0015544184 - Drawing available WPI ACC NO: 2006-108337/200611

XRPX Acc No: N2006-094072

Data processing system e.g. symmetric multiprocessor has peripheral component interconnect host bridges that connect several PCI input/output adapters and system bus, for isolating error in adapters

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNDT R L ; BUCKLAND P A; NORDSTROM G M; THURBER S M

Patent Family (1 patents, 1 countries)

Patent Application

Number Kind Date Number Kind Date Update US 20060010355 A1 20060112 US 2004887524 A 20040708 200611 B

Priority Applications (no., kind, date): US 2004887524 A 20040708

#### Patent Details

Number Kind Lan Pg Dwg Filing Notes US 20060010355 A1 EN 19 10

## Alerting Abstract US A1

NOVELTY - The peripheral component interconnect (PCI) host bridges (PHBs) connect several PCI input/output adapters (IOAs) and system bus. The bridges include isolate errors in the IOAs from other adapters.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.method for isolating error in input/output unit; and
- 2.apparatus for isolating error in input/output unit.

USE - Data processing system e.g. symmetric multiprocessor (SMP) system, IBM e-server, logical **partitioned** (LPAR) data processing system, for isolating input/output adapter error domains.

ADVANTAGE - Reliably isolates errors in the input/output adapters, while permitting usage of low cost, industry standard switches and bridges external to host bridge.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the data processing system.

Title Terms/Index Terms/Additional Words: DATA; PROCESS; SYSTEM; SYMMETRICAL; MULTIPROCESSOR; PERIPHERAL; COMPONENT; INTERCONNECT; HOST; BRIDGE; CONNECT; INPUT; OUTPUT; BUS; ISOLATE; ERROR

## Class Codes

International Classification (+ Attributes)
IPC + Level Value Position Status Version
 G06F-0011/00 A I F B 20060101
US Classification, Issued: 714056000

File Segment: EPI;
DWPI Class: T01

Manual Codes (EPI/S-X): T01-H05B4; T01-H07A2

# (Item 7 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0015544129 - Drawing available WPI ACC NO: 2006-108282/200611

XRPX Acc No: N2006-094017

Data processing system e.g. logical partitioned data processing system, has host bridge connected to system bus, which isolates interrupt resources available to input/output units from one another using identifier

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC) Inventor: ARNDT R L ; BUCKLAND P A; NORDSTROM G M;

THURBER S M

Patent Family (1 patents, 1 countries)

Application Patent

Number Kind Date Number Kind Update US 20060010277 A1 20060112 US 2004887525 A 20040708 200611 B

Priority Applications (no., kind, date): US 2004887525 A 20040708

#### Patent Details

Dwg Filing Notes Number Kind Lan Рg US 20060010277 A1 EN 13 6

## Alerting Abstract US A1

NOVELTY - The data processing system has the input/output units connected to host bridge, which is identified by an identifier. The host bridge connected to a system bus, includes functionality for isolating interrupt resources available to input/output units from one another using identifier.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.interrupt resources isolating method; and
- 2.interrupt resources isolating apparatus.

USE - E.g. logical partitioned (LPAR) data processing system. ADVANTAGE - Permits the use of low cost, industry standard switches and bridges external to host bridge.

DESCRIPTION OF DRAWINGS - The figure shows a flow diagram explaining the operation for isolating input/output adapter interrupt domains.

Title Terms/Index Terms/Additional Words: DATA; PROCESS; SYSTEM; LOGIC; PARTITION ; HOST; BRIDGE; CONNECT; BUS; ISOLATE; INTERRUPT; RESOURCE; AVAILABLE; INPUT; OUTPUT; UNIT; ONE; IDENTIFY

### Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0013/14 A I L B 20060101 G06F-0013/24 A I F B 20060101 G06F-0013/20 C I F B 20060101

US Classification, Issued: 710305000, 710260000, 710262000

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-H05B2; T01-H07C7; T01-H08; T01-M02C

## (Item 8 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0015544128 - Drawing available WPI ACC NO: 2006-108281/200611

XRPX Acc No: N2006-094016

Logical partitioned data processing system e.g. symmetric multiprocessor system comprises several input/output units connected to host bridge that includes functionality for isolating input/output units from one another

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNOT R L ; BUCKLAND P A; NORDSTROM G M; THURBER S M

Patent Family (1 patents, 1 countries)

Patent Application

Number Kind Date Number Kind Date Update

US 20060010276 A1 20060112 US 2004887522 A 20040708 200611 F

Priority Applications (no., kind, date): US 2004887522 A 20040708

#### Patent Details

Number Kind Lan Pg Dwg Filing Notes US 20060010276 A1 EN 14 6

#### Alerting Abstract US A1

NOVELTY - The data processing system comprises a host bridge connected to a system bus, and several input/output units connected to the host bridge. The host bridge includes functionality for isolating the input/output units from one another.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.method for isolating several input/output units in data processing system;
- 2.method for isolating direct memory access to memory of data processing system;
- 3.apparatus for isolating several input/output units; and
- 4.apparatus for isolating direct memory access.

USE - Logical partitioned (LPAR) data processing system e.g. symmetric multiprocessor system.

ADVANTAGE - Permits use of low cost, industry standard switches and bridges external to the host bridge.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the system for providing resource isolation in the data processing system.

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION; DATA; PROCESS; SYSTEM; SYMMETRICAL; MULTIPROCESSOR; COMPRISE; INPUT; OUTPUT; UNIT; CONNECT; HOST; BRIDGE; FUNCTION; ISOLATE; ONE

## Class Codes

International Classification (+ Attributes)
IPC + Level Value Position Status Version
 G06F-0013/14 A I F B 20060101
US Classification, Issued: 710305000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-H07C7; T01-H08; T01-M02C

## 9/5/9 (Item 9 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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0015458487 - Drawing available WPI ACC NO: 2006-018365/200602 XRPX Acc No: N2006-016127

Remote memory access in data processing system, involves retrieving extended cross-memory descriptor providing description of remote memory in

client partition, for accessing remote memory from server partition Patent Assignee: IBM UK LTD (IBMC); INT BUSINESS MACHINES CORP

Inventor: ASLOT V C; MEALEY B; MEALEY B G

Patent Family (2 patents, 109 countries)

Application Patent

Number Kind Date Number Kind Date Update US 20050268047 A1 20051201 US 2004855726 Α 20040527 200602 WO 2005EP52279 200602 E 20051215 A 20050518 WO 2005119444 Α1

Priority Applications (no., kind, date): US 2004855726 A 20040527

## Patent Details

Pg Dwg Filing Notes Number Kind Lan

US 20050268047 A1

WO 2005119444 Α1

National Designated States, Original: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KM KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NZ NA NG NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Regional Designated States, Original: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS IT KE LS LT LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

# Alerting Abstract US A1

NOVELTY - An extended cross-memory descriptor providing description of the remote memory in client partition , is retrieved. The remote memory in the client partition is accessed from server partition , based on the retrieved extended cross-memory descriptor.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.computer program product for accessing remote memory in client partition from server partition; and
- 2.system for accessing remote memory in client partition from server partition .

USE - For accessing remote memory in client partition from server partition , in data processing system.

ADVANTAGE - Remote memory copy and direct memory access (DMA) operations are enabled by the use of the extended descriptor. The need to modify the interfaces and memory management services present in computing device to handle the extended cross-memory descriptor, is eliminated.

DESCRIPTION OF DRAWINGS - The figure shows a flowchart explaining a

process for accessing remote memory, in data processing system.

Title Terms/Index Terms/Additional Words: REMOTE; MEMORY; ACCESS; DATA; PROCESS; SYSTEM; RETRIEVAL; EXTEND; CROSS; DESCRIBE; CLIENT; PARTITION ; SERVE

### Class Codes

International Classification (Main): G06F-012/00, G06F-009/46 (Additional/Secondary): G06F-012/10 US Classification, Issued: 711147000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05E; T01-H05B2; T01-S03

## (Item 10 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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0015231810 - Drawing available WPI ACC NO: 2005-581874/200559

XRPX Acc No: N2005-477482

Shared resource management method in logical partitioned data processing system, involves providing logical resource corresponding to physical resource to client partition, and mapping with physical resource by client partition

Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNOT R L ; MEALEY B G ; THURBER S M

Patent Family (2 patents, 2 countries)

Patent Application

Number Kind Date Number Kind Date US 2004777724 US 20050182788 20050818 20040212 200559 A1 Α 20050817 CN 200510006424 A 20050131 200572 E CN 1655123 Α

Priority Applications (no., kind, date): US 2004777724 A 20040212

#### Patent Details

Number Kind Lan Pg Dwg Filing Notes US 20050182788 A1 EN 13 5

Alerting Abstract US A1

NOVELTY - A logical resource corresponding to physical resource is provided to a client **partition** and is mapped with physical resource by the client **partition** in the logical **partitioned** data processing system. DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.logical partitioned data processing system; and
- 2.computer program product for managing shared resources.

USE - For managing shared resources in logical **partitioned** (LPAR) data processing system (claimed).

ADVANTAGE - Prevents new virtual to physical mappings of logical resources effectively.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the data processing system.

Title Terms/Index Terms/Additional Words: SHARE; RESOURCE; MANAGEMENT; METHOD; LOGIC; PARTITION; DATA; PROCESS; SYSTEM; CORRESPOND; PHYSICAL; CLIENT; MAP

### Class Codes

International Classification (Main): G06F-017/00, G06F-009/46 US Classification, Issued: 707103R00

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F02C; T01-N02A2C; T01-S03

## 9/5/11 (Item 11 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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0015155412 - Drawing available WPI ACC NO: 2005-504992/200551 XRPX Acc No: N2005-412103

Multicast operation performing method in logically partitioned data processing system, involves forwarding received packet to trusted software in response to that packet is intended for multicasting and that no matching entry exists

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: ARNDT R L ; BEUKEMA B L; CRADDOCK D F; FUHS R E; GREGG T A;
PAYNTON C C; ROGERS S L; SCHMIDT D W; WALK B M

Patent Family (1 patents, 1 countries)

Patent Application

Number Kind Date Number Kind Date Update
US 20050144313 A1 20050630 US 2003718299 A 20031120 200551 B

Priority Applications (no., kind, date): US 2003718299 A 20031120

#### Patent Details

Number Kind Lan Pg Dwg Filing Notes US 20050144313 Al EN 18 11

Alerting Abstract US A1

NOVELTY - A multicast table in a host channel adapter is checked to determine whether a matching entry exists. The received packet is forwarded to trusted software in response to determination that the packet is intended for multicasting and that no matching entry exists. The software forwards the packet to the appropriate recipient logical **partitions**.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.computer program product for multicast operation; and
- 2.data processing system.

USE - For performing multicast operation in system area network (SAN) in data processing systems (claimed) such as logically **partitioned** data processing system, symmetric multiprocessing system.

ADVANTAGE - The SAN multicasting functionality in the data processing system is proved efficiently. The multicast protocol handling and distribution of the packets among the logical **partition**, are allowed effectively.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the multicast network.

102 queue pairs

Title Terms/Index Terms/Additional Words: OPERATE; PERFORMANCE; METHOD; LOGIC; PARTITION; DATA; PROCESS; SYSTEM; FORWARDING; RECEIVE; PACKET; SOFTWARE; RESPOND; INTENDED; NO; MATCH; ENTER; EXIST

### Class Codes

International Classification (Main): G06F-015/173 US Classification, Issued: 709238000

File Segment: EPI; DWPI Class: T01; W01

Manual Codes (EPI/S-X): T01-N02A3B; T01-N02B1; T01-S03; W01-A03B; W01-A06E1; W01-A06G2

9/5/12 (Item 12 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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0015035667 - Drawing available WPI ACC NO: 2005-383659/200539

XRPX Acc No: N2005-310993

Method for emulating logical ports in logically- partitioned data processing system, involves providing general services management queue pair for physical port and receiving packets intended for logical ports, at physical port

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNDT R L ; BEUKEMA B L; CRADDOCK D F; FUHS R E; GREGG T A;

PAYNTON C C; ROGERS S L; SCHMIDT D W; WALK B M

Patent Family (1 patents, 1 countries)
Patent Application

Number Kind Date Number Kind Date Update

A1 20050512 US 2003702994 A 20031106 200539 B US 20050100033

Priority Applications (no., kind, date): US 2003702994 A 20031106

#### Patent Details

Pg Dwg Filing Notes Kind Lan Number US 20050100033 26 16 A1 EN

Alerting Abstract US A1

NOVELTY - The method involves providing general services management queue pair for a physical port and receiving the packets intended for logical ports, at the physical port. An aliased general services management queue pair, is provided for the logical ports.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.logically- partitioned data processing system;
- 2.computer program product for emulating multiple logical ports on physical port.

USE - For emulating multiple logical ports on physical port in logicallypartitioned data processing system (claimed) in distributed computing environment such as system area network (SAN).

ADVANTAGE - Enables efficient emulation of the logical ports. Allows for reliable connection between end nodes of the distributed computing system. DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the structure of the distributed computer system.

Title Terms/Index Terms/Additional Words: METHOD; EMULATION; LOGIC; PORT; PARTITION ; DATA; PROCESS; SYSTEM; GENERAL; SERVICE; MANAGEMENT; QUEUE; PAIR; PHYSICAL; RECEIVE; PACKET; INTENDED

## Class Codes

International Classification (Main): H04L-012/56 US Classification, Issued: 370412000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05G3; T01-M02A; T01-N02A2D; T01-S03

#### (Item 13 from file: 350) 9/5/13

DIALOG(R) File 350: Derwent WPIX

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0015005342 - Drawing available WPI ACC NO: 2005-353247/200536

XRPX Acc No: N2005-288313

Logically partitioned data processing system includes hypervisor that comprises function sets each including list of functions that are called by any one of operating systems to perform tasks for OS

Patent Assignee: INT BUSINESS MACHINES CORP Inventor: ARNDT R L (IBMC)

Patent Family (1 patents, 1 countries) Application Patent

Update Kind Date Number Kind Date Number A 20000608 20050510 US 2000589662 200536 US 6892383 В1

Priority Applications (no., kind, date): US 2000589662 A 20000608

## Patent Details

Number Kind Lan Pg Dwg Filing Notes US 6892383 **B**1 ΕN 12

# Alerting Abstract US B1

NOVELTY - The hypervisor includes function sets each including a list of

functions that are called by any one of operating systems (OS) to perform tasks for OS while maintaining separation between each logical **partitions**. The hypervisor informs each OS of an enabled function set. Functions identified within enabled function set are enabled for use by OS and function not identified within enabled function set are disabled for use by OS.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.method of identifying hypervisor function calls;
- 2.computer program product for identifying hypervisor function calls; and
- 3.system for identifying hypervisor function calls.

USE - Logically partitioned data processing system including client terminals such as personal computer, laptop computer, printer connected to network such as internet, local area network (LAN).

ADVANTAGE - Makes the operating system within the logically **partitioned** system aware of which functions are available to it through the firmware component.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the logically partitioned platform.

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION; DATA; PROCESS; SYSTEM; COMPRISE; FUNCTION; SET; LIST; CALL; ONE; OPERATE; PERFORMANCE; TASK; OS

## Class Codes

International Classification (Main): G06F-009/455

(Additional/Secondary): G06F-012/00

US Classification, Issued: 718001000, 711006000, 711203000

File Segment: EPI; DWPI Class: T01; T04

Manual Codes (EPI/S-X): T01-C05A1; T01-F05G5; T01-H01C2; T01-N02A2A;

T01-S03; T04-G10E

## 9/5/14 (Item 14 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0014946756 - Drawing available WPI ACC NO: 2005-294516/200530 XRPX Acc No: N2005-241857

Resource partition method of single channel adapter used in storage area network, involves enforcing partitioning of multiple resources by permitting access to two different resources assigned to partitions Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC) Inventor: ARNDT R L; BEUKEMA B L; CRADDOCK D F; FUHS R E; GREGG T A; SCHMIDT D W; WALK B M

Patent Family (2 patents, 2 countries)

Patent Application

Number Kind Date Number Kind Date Update US 20050071472 20050331 US 2003674985 A 20030930 200530 В A1 CN 1604057 Α 20050406 CN 200410063327 A 20040708 200553

Priority Applications (no., kind, date): US 2003674985 A 20030930

## Patent Details

Number Kind Lan Pg Dwg Filing Notes

US 20050071472 A1 EN 77 14

Alerting Abstract US A1

NOVELTY - The partitioning of the multiple resources of single channel adapter are enforced by permitting access to two different resources assigned to the partitions .

DESCRIPTION - An INDEPENDENT CLAIM is also included for logically

partitioning resources.

USE - For logically partitioning resources of single channel adapter in distributed computing system connected to storage area network (SAN).

ADVANTAGE - Ensures distribution of packets without corrupted contents in distributed computing system, hence improves the performance of distributed computing system efficiently.

DESCRIPTION OF DRAWINGS - The figure shows the flowchart explaining the resource partitioning process.

Title Terms/Index Terms/Additional Words: RESOURCE; PARTITION; METHOD; SINGLE; CHANNEL; STORAGE; AREA; NETWORK; ENFORCE; MULTIPLE; PERMIT; ACCESS; TWO; ASSIGN

## Class Codes

International Classification (+ Attributes) IPC + Level Value Position Status Version R 20060101 H04L-0012/56 A I

R 20060101 H04L-0029/06 A I H04L-0029/08 A N R 20060101 20060101 H04L-0012/56 C I R H04L-0029/06 C I R 20060101 H04L-0029/08 C N R 20060101 US Classification, Issued: 709226000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F02C2; T01-M02A; T01-N02A2D

#### (Item 15 from file: 350) 9/5/15

DIALOG(R) File 350: Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0014945449 - Drawing available WPI ACC NO: 2005-293207/200530

XRPX Acc No: N2005-240603

Virtual address translation mediating method for use in symmetric multiprocessor system, involves modifying page frame table for allowing access to resource by operating system, based on resource allocation determination result

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC); IBM CORP (IBMC) Inventor: ARNDT R L

Patent Family (2 patents, 2 countries)

Application

Date Update Number Kind Number Kind Date A 20000608 US 2000589795 200530 20050405 US 6877158 B1 A 20010513 200634 20060221 IL 143111 IL 143111 Α

Priority Applications (no., kind, date): US 2000589795 A 20000608

## Patent Details

Pg Dwg Filing Notes Number Kind Lan US 6877158 В1 EN 10 EN IL 143111 Α

# Alerting Abstract US B1

NOVELTY - The method involves receiving a request at a hypervisor (310), to access a physical resource (360) from an operating system (OS). The hypervisor consults an allocation table to determine whether the resource is allocated to the requesting OS. A page frame table is modified by

mapping virtual address of the OS with resource physical address, to allow access to the resource by the system, based on the determination result.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.a computer program product in a computer readable media for mediating address translation in a logically partitioned data processing system
- 2.a system for mediating address translation in a logically partitioned data processing system.

USE - Used for mediating virtual address translation between operating systems in a data processing system e.g. symmetric multiprocessor (SMP) system, IBM RS/6000.

ADVANTAGE - The allocation of the physical resources is easily modified by making changes to the page frame table, without requiring hardware reconfiguration. The page frame table is directly modified, without requiring the operating system to perform the modification, thus preventing potential interference between the operating systems.

DESCRIPTION OF DRAWINGS - The drawing shows a block diagram for mediating virtual address translation

302.304,306,308 Operating systems

310 Hypervisor

320,330,340,350 Page frame tables

360 Physical resources

Title Terms/Index Terms/Additional Words: VIRTUAL; ADDRESS; TRANSLATION; METHOD; SYMMETRICAL; MULTIPROCESSOR; SYSTEM; MODIFIED; PAGE; FRAME; TABLE; ALLOW; ACCESS; RESOURCE; OPERATE; BASED; ALLOCATE; DETERMINE; RESULT

#### Class Codes

International Classification (Main): G06F-009/46
US Classification, Issued: 718100000, 718102000, 711202000, 711203000, 711206000, 718104000

File Segment: EPI;
DWPI Class: T01

Manual Codes (EPI/S-X): T01-H01A; T01-M02C; T01-S03

## 9/5/16 (Item 16 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0014912941

WPI ACC NO: 2005-260611/200527

Related WPI Acc No: 2002-328418; 2003-743618

XRPX Acc No: N2005-213928

Logically partitioned data processing system has input/output adapters associated with respective logical partitions, that are connected to terminal bridge connected to data transmission bus

Patent Assignee: ARNDT R L (ARND-I); INT BUSINESS MACHINES CORP (IBMC); NEAL D M (NEAL-I); THURBER S M (THUR-I)

Inventor: ARNDT R L ; NEAL D M; THURBER S M

Patent Family (2 patents, 1 countries)

Patent Application

Number Kind Date Number Kind Date Update
US 20050055470 A1 20050310 US 2000589665 A 20000608 200527 B

US 2001766764 A 20010123 US 2004953920 A 20040929

US 6973510 B2 20051206 US 2004953920 A 20040929 200580 E

Priority Applications (no., kind, date): US 2001766764 A 20010123; US 2000589665 A 20000608; US 2004953920 A 20040929

Patent Details

Number Kind Lan Pg Dwg Filing Notes
US 20050055470 A1 EN 15 7 C-I-P of application US 2000589665
Division of application US 2001766764

C-I-P of patent US 6629162 Division of patent US 6823404

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## Alerting Abstract US A1

NOVELTY - The system has input/output (I/O) adapters associated with respective logical **partitions**, that are connected to terminal bridge connected to data transmission bus. A hypervisor prevents transmission of data between I/O adapter and memory locations unassigned to logical **partitions**.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.method for preventing fetching or corrupting data; and
- 2.computer program product for preventing fetching or corrupting data.

USE - Logically partitioned data processing system.

ADVANTAGE - Enables implementing logically partitioned data processing with less cost by sharing terminal bridges among several I/O adapters.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the data processing system.

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION; DATA; PROCESS; SYSTEM; INPUT; OUTPUT; ASSOCIATE; RESPECTIVE; CONNECT; TERMINAL; BRIDGE; TRANSMISSION; BUS

## Class Codes

International Classification (Main): G06F-003/00

(Additional/Secondary): G06F-003/06

US Classification, Issued: 710001000, 710036000, 710037000, 710008000, 710009000

File Segment: EPI;
DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05E; T01-H05B2; T01-H07A; T01-J12C; T01-S03

### 9/5/17 (Item 17 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0014802688 - Drawing available WPI ACC NO: 2005-150374/200516 XRPX Acc No: N2005-126748

Logical port emulating method for use in host channel adaptor, involves providing logical ports, receiving packets for logical ports at physical port, and providing aliased subnet manager queue pair for logical ports Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC) Inventor: ARNOT R L; BEUKEMA B L; CRADDOCK D F; GREGG T A; SCHMIDT D W; WALK B M

Patent Family (2 patents, 2 countries)

Patent Application

Number Kind Date Number Kind Date Update US 2003626988 A US 20050018669 20050127 20030725 A1 200516 20050518 CN 200410071346 A 20040720 CN 1617526 Α 200558 Ε

Priority Applications (no., kind, date): US 2003626988 A 20030725

## Patent Details

Number Kind Lan Pg Dwg Filing Notes

US 20050018669 A1 EN 24 15

Alerting Abstract US A1

NOVELTY - The method involves providing a subnet management queue pair for a physical port. A group of logical ports are provided. Packets for the logical ports are received at the physical port. An aliased subnet manager queue pair for the logical ports is provided. A packet is received at the physical port and looped back to one logical port when the packet is intended for the logical port.

DESCRIPTION - An INDEPENDENT CLAIM is also included for an apparatus for

emulating multiple logical ports on a physical port.

USE - Used in a storage area network for emulating a logical port on a physical port of a host channel adaptor.

ADVANTAGE - The method efficiently associates the physical port and the queue pair with multiple logical partitions.

DESCRIPTION OF DRAWINGS - The drawing shows a flowchart for a process of sending a subnet management packet in a host channel adapter.

Title Terms/Index Terms/Additional Words: LOGIC; PORT; EMULATION; METHOD; HOST; CHANNEL; ADAPT; RECEIVE; PACKET; PHYSICAL; MANAGE; QUEUE; PAIR

#### Class Codes

International Classification (Main): H04L-012/56 International Classification (+ Attributes)
IPC + Level Value Position Status Version
H04L-0012/56 A I R 20060101
H04L-0012/56 C I R 20060101
US Classification, Issued: 370412000, 370389000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05G3; T01-N02A3B

## 9/5/18 (Item 18 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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0014681723 - Drawing available

WPI ACC NO: 2005-029307/ XRPX Acc No: N2005-025313

Logically- partitioned computer dynamically enables machine check signaling in input/output fabric element defining hardware path between adapter slot and processors, if device driver is detected to be non-recoverable device driver

Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC) Inventor: BAILEY D'A; NGUYEN T N; NORDSTROM G M; PATEL K; THURBER S M Patent Family (3 patents, 3 countries)

Patent Application

Number Kind Date Number Kind Date Update 20041118 US 20040230861 A1 US 2003438392 Α 20030515 200503 JP 2004142836 JP 2004342109 20041202 Α Α 20040512 200503 20041120 KR 200425747 KR 2004098520 A 20040414 200523

Priority Applications (no., kind, date): US 2003438392 A 20030515

## Patent Details

Number Kind Lan Pg Dwg Filing Notes US 20040230861 A1 EN 19 6 JP 2004342109 A JA 30

## Alerting Abstract US A1

NOVELTY - A **partition** manager executes program to recover from error after error state is established for each subset of input/output (IO) adapter slots, if error is detected in IO fabric element. The manager

executes another program to dynamically enable machine check signaling in each IO fabric element defining hardware path between adapter slot and processors, if device driver is detected to be non-recoverable device driver.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.error handling method; apparatus for error handling;
- 2.program product for error handling;
- 3.program product for configuring input/output (IO) fabric; and
- 4.IO fabric configuring method.

USE - Logically- partitioned computer.

ADVANTAGE - Enables correcting errors in the IO fabric dynamically and greatly simplifies the synchronization of resource and fabric error recovery.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the hardware components in the logically- partitioned computer.

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION; COMPUTER; DYNAMIC; ENABLE; MACHINE; CHECK; INPUT; OUTPUT; FABRIC; ELEMENT; DEFINE; HARDWARE; PATH; SLOT; PROCESSOR; DEVICE; DRIVE; DETECT; NON; RECOVER

#### Class Codes

International Classification (Main): G06F-011/00, G06F-009/46, H02H-003/05 US Classification, Issued: 714006000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-C07C; T01-F02C1; T01-F05B2; T01-G05C; T01-S03

# 9/5/19 (Item 19 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0014630394 - Drawing available WPI ACC NO: 2004-812392/200480

XRPX Acc No: N2004-640975

Computer system hardware e.g. memory cards, indicator lights managing method, involves finding state of hardware indicator lights as function of states of virtual lights by generating logical OR function of virtual lights states

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: AHRENS G H; EIDE C S; THURBER S M

Patent Family (2 patents, 1 countries)

Patent Application

Number Kind Date Number Kind Update Date US 20040212511 20041028 A1 US 2003424641 20030425 200480 Α US 7076570 B2 20060711 US 2003424641 20030425 200646

Priority Applications (no., kind, date): US 2003424641 A 20030425

## Patent Details

Number Kind Lan Pg Dwg Filing Notes US 20040212511 Al EN 18 5

Alerting Abstract US A1

NOVELTY - The method involves setting a state of each respective virtual indicator lights in response to a corresponding request from a process executing within a logical **partition** to which respective virtual indicator light corresponds. State of hardware indicator lights (210A-D) is found as a function of states of the virtual lights by generating a logical

- OR function of the states of the virtual lights.

  DESCRIPTION INDEPENDENT CLAIMS are also included for the following:
  - 1.a computer program product for managing hardware indicator lights in a computer system
  - 2.a computer system.

USE - Used for managing hardware e.g. cards such as processor card and memory card, racks, and drawers, indicator lights in a logically partitioned computer system.

ADVANTAGE - The method allows process running in different logical partitions to control over its respective hardware indicators light, without creating covert communications channels or interfering with other essential functions of the partitions.

DESCRIPTION OF DRAWINGS - The drawing shows a simplified representation of a hierarchy of physical units and indicator lights in the computer system.

211-214 Drawers 210A-D Indicators

Title Terms/Index Terms/Additional Words: COMPUTER; SYSTEM; HARDWARE; MEMORY; CARD; INDICATE; LIGHT; MANAGE; METHOD; FINDER; STATE; FUNCTION; VIRTUAL; GENERATE; LOGIC

## Class Codes

International Classification (+ Attributes)
IPC + Level Value Position Status Version
 G06F-0003/00 A I F B 20060101
 G08B-0021/00 A I R 20060101

G08B-0021/00 A I R 20060101 G08B-0021/00 C I R 20060101

US Classification, Issued: 340641000, 340815400, 340635000, 710006000, 710020000, 710033000, 710036000, 710058000, 709200000, 711200000, 714100000

File Segment: EPI; DWPI Class: T01; U21

Manual Codes (EPI/S-X): T01-F05B2; T01-S03; U21-C03B

## 9/5/20 (Item 20 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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0014621783 - Drawing available WPI ACC NO: 2004-803771/200479 XRPX Acc No: N2004-633631

Simultaneous multithreaded processor controlling method for e.g. desktop computers, involves deactivating thread while permitting reactivation of thread in response assertion of interrupt, and when processor enters idle loop

Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC) Inventor: ARMSTRONG W J; BARARAMU S; MEALEY B G; NAYAR N; SINHAROY B Patent Family (4 patents, 4 countries)

Patent Application Date Number Kind Number Kind Date Update US 20040215939 A 20030424 200479 A1 20041028 US 2003422682 В JP 2004326749 Α 20041118 JP 2004105481 Α 20040331 200479 Ε CN 200410002887 A 20040120 CN 1540508 Α 20041027 200512 E A 20040324 KR 2004092399 20041103 KR 200419968 Α 200517 E

Priority Applications (no., kind, date): US 2003422682 A 20030424

# Patent Details

Number Kind Lan Pg Dwg Filing Notes US 20040215939 A1 EN 13 8 JP 2004326749 A JA 22

# Alerting Abstract US A1

NOVELTY - The method involves deactivating a hardware thread (18) while inhibiting reactivation of the hardware thread in response to assertion of an interrupt and in connection with taking a logical processor offline a partition. The hardware thread is deactivated while permitting reactivation of the hardware thread in response assertion of another interrupt, and in response to the logical processor entering an idle loop. DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.an apparatus for controlling a simultaneous multithreaded processor resident in a logically partitioned computer
- 2.a program product for controlling a simultaneous multithreaded processor resident in a logically partitioned computer.

USE - Used for controlling a simultaneous multithreaded processor resident in a logically **partitioned** computer e.g. computers, midrange computer, a mainframe computer, an IBM eServer computer, single-user computers such as workstations, desktop computers, portable computers, and programmable electronic devices.

ADVANTAGE - The method provides greater control over resources consumed by hardware thread executing in a multithreaded processor, and hence reduces the inefficiencies that may occur due to the inefficient allocation of resources among threads in a multithreaded processor.

DESCRIPTION OF DRAWINGS - The drawing shows a block diagram of principal hardware components in a logically- partitioned computer.

- 18 Hardware thread
- 22 Network adapters
- 26 Storage controllers
- 36 Memory
- 46 Virtual LAN

Title Terms/Index Terms/Additional Words: SIMULTANEOUS; PROCESSOR; CONTROL; METHOD; COMPUTER; DEACTIVATE; THREAD; PERMIT; REACTIVATION; RESPOND; INTERRUPT; ENTER; IDLE; LOOP

## Class Codes

International Classification (Main): G06F-009/38, G06F-009/46
International Classification (+ Attributes)
IPC + Level Value Position Status Version
 G06F-0009/00 A I R 20060101
 G06F-0009/46 A I R 20060101
 G06F-0009/00 C I R 20060101
 G06F-0009/46 C I R 20060101
US Classification, Issued: 712220000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F03; T01-F07; T01-S03

## 9/5/21 (Item 21 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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0014600538 - Drawing available WPI ACC NO: 2004-782504/200477 XRPX Acc No: N2004-616521

Host channel adapter facility access control method in system area network, involves determining usage class of requester of accessing facility based

# on identification of page of memory associated with address of request

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNDT R L ; BEUKEMA B L; CRADDOCK D F; FUHS R E; GREGG T A; WALK

Patent Family (3 patents, 2 countries)

Application Patent

Number		Kind	Date	Nur	nber	Kind	Date	Update	
US	20040205253	A1	20041014	US	2003411447	Α	20030410	200477	В
CN	1536842	A	20041013	CN	200410032547	7 A	20040408	200508	E
US	7010633	B2	20060307	US	2003411447	Α	20030410	200618	E

Priority Applications (no., kind, date): US 2003411447 A 20030410

#### Patent Details

Pg Dwg Filing Notes Number Kind Lan US 20040205253 A1 EN 28 16

## Alerting Abstract US A1

NOVELTY - A page of memory associated with the address of the request for accessing the host channel adapter (HCA) facility, is identified. The usage class such as user address space, privileged/super privileged address space or real address space of the requester, is determined based on the identification of the page of memory, for controlling access to HCA facility.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.computer program product comprising instructions for controlling access to host channel adapter facility; and
- 2.apparatus for controlling access to host channel adapter facility.

USE - For controlling access to HCA facility in system area network (SAN) such as \*\*InfiniBand \*\* (IB) network, by implementing logical partitioning

ADVANTAGE - An unauthorized access to HCA facility in SAN, is prevented effectively. The failure or fault in the operation of an operating system is isolated to the HCA facility associated with the logical partition of the operating system and thus, the other logical partitions of SAN are not affected.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of a distributed computer system.

Title Terms/Index Terms/Additional Words: HOST; CHANNEL; FACILITY; ACCESS; CONTROL; METHOD; SYSTEM; AREA; NETWORK; DETERMINE; CLASS; BASED; IDENTIFY ; PAGE; MEMORY; ASSOCIATE; ADDRESS; REQUEST

### Class Codes

International Classification (+ Attributes) IPC + Level Value Position Status Version

G06F-0013/14 A I F B 20060101

G06F-0015/173 A I L B 20060101 G06F-0012/14 A I R 20060101 R 20060101 R 20060101

H04L-0012/56 A I G06F-0015/16 C I L B 20060101

G06F-0012/14 C I R 20060101 H04L-0012/56 C I R 20060101 US Classification, Issued: 710001000, 710243000, 710026000, 709240000

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05G3; T01-H01A; T01-H01B1A; T01-N02A3B;

T01-N02B1A; T01-S03

## 9/5/22 (Item 22 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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0014583257 - Drawing available WPI ACC NO: 2004-765219/200475

XRPX Acc No: N2004-603681

Interrupts virtualizing apparatus for logically partitioned computer system, has interrupt management mechanism residing in memory and executed by processor to use virtual interrupt registers for processing multiple interrupts

Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARMSTRONG W J; ARNDT R L ; NAYAR N

Patent Family (4 patents, 3 countries)

Patent			Application				
Number	Kind	Date ·	Number	Kind	Date	Update	
US 20040205272	A1	20041014	US 2003403158	A	20030331	200475	В
JP 2004303237	A	20041028	JP 200485678	Α	20040323	200475	E
KR 2004086167	A	20041008	KR 200413433	Α	20040227	200512	Ε
US 7000051	B2	20060214	US 2003403158	Α	20030331	200615	E

Priority Applications (no., kind, date): US 2003403158 A 20030331

## Patent Details

Number	Kind	Lan	Рg	Dwg	Filing	Notes
US 20040205272	A1	EN	17	10		
JP 2004303237	Α	JA	24			

#### Alerting Abstract US A1

NOVELTY - The apparatus has a memory coupled to a processor, and a set of logical partitions defined on the apparatus. Each of a set of virtual interrupt registers (124) residing in the memory corresponds to a physical interrupt register residing in the processor. An interrupt management mechanism (122) residing in the memory and executed by the processor uses the interrupt registers to process multiple interrupts.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.a computer-implemented method for processing interrupts in a computer system
- 2.a program product for processing interrupts in a computer system.

USE - Used for virtualizing interrupts of a logically **partitioned** computer system e.g. enhanced IBM eServer computer system.

ADVANTAGE - The interrupt management mechanism transforms and routes the interrupts from physical processors to the virtual processor in the logical partition, thus processing interrupts in a computer system that contains shared processors without changing the interrupt processing model for operating systems. The mechanism presents interrupts to the partitions instead of the hardware, and as a result, other virtual interrupts are generated by the mechanism and presented to the partitions as if they were hardware interrupts.

DESCRIPTION OF DRAWINGS - The drawing shows a block diagram depicting a logical view of the components in a computer system.

- 121 Resource and partition manager
- 122 Interrupt management mechanism
- 123 Virtual processor control mechanism
- 124 Virtual interrupt registers
- 230 Interrupt management interface. . .

Title Terms/Index Terms/Additional Words: INTERRUPT; APPARATUS; LOGIC; PARTITION; COMPUTER; SYSTEM; MANAGEMENT; MECHANISM; MEMORY; EXECUTE; PROCESSOR; VIRTUAL; REGISTER; PROCESS; MULTIPLE

#### Class Codes

International Classification (Main): G06F-013/24, G06F-009/22, G06F-009/46 International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0013/24 A I F B 20060101 G06F-0009/45 A I L B 20060101

G06F-0013/20 C I F B 20060101 US Classification, Issued: 710260000, 710267000, 710269000, 712203000, 717149000, 719324000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F02A1; T01-F05E; T01-F05G3; T01-S03

#### (Item 23 from file: 350) 9/5/23

DIALOG(R) File 350: Derwent WPIX

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0014574580 - Drawing available

WPI ACC NO: 2004-756538/ XRPX Acc No: N2004-597440

Host channel adapter resource partitioning method for use in system area network e.g. infiniband network, involves providing switch for routing data packet to resources based on logical identifier associated with packet

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNDT R L ; BEUKEMA B L; CRADDOCK D F; FUHS R E; GREGG T A;

MERITT A S; PAYNTON C C; ROGERS S L; SCHMIDT D W; WALK B M

Patent Family (1 patents, 1 countries)

Patent Application

Number Date Kind Number Kind Date Update US 20040202189 A1 20041014 US 2003411448 200474 B A 20030410

Priority Applications (no., kind, date): US 2003411448 A 20030410

## Patent Details

Number Kind Lan Pg Dwg Filing Notes US 20040202189 A1 EN 25 14

# Alerting Abstract US A1

NOVELTY - The method involves assigning a logical identifier to a set of resources of a host channel adapter to define a logical partition . Another logical identifier is assigned to another set of resources of the adapter to define another logical partition . A switch is provided for routing a data packet to the two set of resources based on the logical identifier associated with the data packet.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.an apparatus for logically partitioning resources of a host channel adapter for use in a system area network
- 2.a computer program product in a computer readable medium for logically partitioning resources of a host channel adapter for use in a system area network.

USE - Used for partitioning resource of a host channel adapter in a

system area network e.g. infiniband network.

ADVANTAGE - The method provides the logical switch for routing the data packet to the resources based on the logical identifier associated with the packet, thus allowing operating systems to share the resources of the adapter. The method also ensures that each operating system is unaware that the adapter hardware resources are being shared with other operating system. The method prevents the individual operating system from accessing the adapter hardware resources, which are associated with other operating

system.

DESCRIPTION OF DRAWINGS - The drawing shows a diagram of a distributed computer system.

100 System area network

102, 104 Host processor nodes

- 106 Redundant array independent disk subsystem node
- 108 I/O chassis node
- 117 Router

Title Terms/Index Terms/Additional Words: HOST; CHANNEL; RESOURCE; PARTITION; METHOD; SYSTEM; AREA; NETWORK; SWITCH; ROUTE; DATA; PACKET; BASED; LOGIC; IDENTIFY; ASSOCIATE

#### Class Codes

International Classification (Main): H04L-012/28. US Classification, Issued: 370409000

File Segment: EPI;
DWPI Class: T01; W01

Manual Codes (EPI/S-X): T01-N02A3B; T01-S03; W01-A03B; W01-A06E; W01-A06G2

## 9/5/24 (Item 24 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0013889229 - Drawing available WPI ACC NO: 2004-068377/200407

Related WPI Acc No: 2003-766217; 2003-895817

XRPX Acc No: N2004-054984

Logically partitioned data processing system, has processors that retrieve data from alternate copy if failure to retrieve is detected and copies data from primary to alternate copy in response to failure of write operation

english services

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNDT R L

Patent Family (1 patents, 1 countries)

Patent Application

Number Kind Date Number Kind Date Update
US 6658591 B1 20031202 US 2000589797 A 20000608 200407 B

Priority Applications (no., kind, date): US 2000589797 A 20000608

## Patent Details

Number Kind Lan Pg Dwg Filing Notes US 6658591 B1 EN 15 10

Alerting Abstract US B1

NOVELTY - A hypervisor has private data areas (510) with primary and alternate copies of data assigned to processors. In data fetch operation the processors retrieve data from primary or alternate copy if a failure to retrieve from the primary is received. The processors, in response to failure of a write operation to the primary copy, copy data from the primary to the alternate copies, to re-attempt write operation.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.a method of preventing a data fetch error occurring within one partition from affecting the operation of other partition
- 2.a computer program product for preventing a data fetch error occurring within one partition from affecting the operation of other partition

USE - Used for managing resource among multiple operating systems. ADVANTAGE - The system corrects multi-bit errors, recovers and isolates

the errors from affecting the hypervisor. The hypervisor with the data structure areas prevents fatal data fetch errors in one partition from affecting other partitions with the system.

DESCRIPTION OF DRAWINGS - The drawing shows a block diagram of the data structures of the data areas within a hypervisor.

500 Hypervisor data areas

510 Private data areas

522-528 Partition data areas

530 Global data areas

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION; DATA; PROCESS SYSTEM; PROCESSOR; RETRIEVAL; ALTERNATE; COPY; FAIL; DETECT; PRIMARY; RESPOND; WRITING; OPERATE

## Class Codes

International Classification (Main): H02H-003/05

(Additional/Secondary): G06F-015/00, G06F-017/00, G06F-007/38 US Classification, Issued: 714006000, 714011000, 709001000, 712013000,

712228000

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-F02C2; T01-F05E; T01-F05G5; T01-G03; T01-G05C; T01-S03

#### (Item 25 from file: 350) 9/5/25

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0013862075 - Drawing available WPI ACC NO: 2004-040604/200404

XRPX Acc No: N2004-032887

Logically partitioned data processing system for managing resource, has pair of pointers in each copy and hypervisor instructions executed by restarting system in response to receipt of irrecoverable instruction fetch error

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNDT R L

Patent Family (1 patents, 1 countries)

Patent Application

Number Kind Date Number Kind Update Date US 6654906 В1 20031125 US 2000589660 A 20000608 200404

Priority Applications (no., kind, date): US 2000589660 A 20000608

# Patent Details

Number Kind Lan Рg Dwg Filing Notes US 6654906 В1 ΕN

### Alerting Abstract US B1

NOVELTY - The system has a pair of pointers in each copy to identify the beginning of each copy. The system restarts execution of the hypervisor instructions from another instruction in the alternate copy in response to the receipt of an irrecoverable instruction fetch error for a selected instruction from the primary copy, where another instruction corresponds to the selected instruction.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.a method in a data processing system for recovering from an instruction fetch error
- 2.a computer program product in a computer readable media for use in a data processing system for recovering from an instruction fetch error.

USE - Used for managing a resource among multiple operating system images within a logically partitioned data processing system.

ADVANTAGE - The instruction fetch error recovered has a minimal effect or no effect on the operating system images running within the platform. The primary copy of the hypervisor instructions is refreshed from the alternate copy and the small amount of hypervisor code is duplicated, thereby saving the memory space used and maintaining the performance of the system.

DESCRIPTION OF DRAWINGS - The drawing shows a flowchart of a method of recovering from instruction fetch errors.

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION; DATA; PROCESS SYSTEM; MANAGE; RESOURCE; PAIR; POINT; COPY; INSTRUCTION; EXECUTE; RESTART; RESPOND; RECEIPT; FETCH; ERROR

#### Class Codes

International Classification (Main): H02H-003/05 (Additional/Secondary): G06F-015/00, G06F-017/00, G06F-007/38 US Classification, Issued: 714011000, 714020000, 709001000, 712013000, 712228000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05G5; T01-G03; T01-G05A; T01-G05C; T01-N02B2B; T01-S03

#### 9/5/26 (Item 26 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0013813466 - Drawing available WPI ACC NO: 2003-392018/200337

XRPX Acc No: N2003-313164

Partition management firmware debugging method for data processing system, involves establishing extensions such as application programming interface calls within operating system debugger

Patent Assignee: INT BUSINESS MACHINES CORP

Inventor: DAWKINS G J; MEALEY B G

Patent Family (2 patents, 1 countries)

Patent Application

Number Date Number Kind Update Kind Date 20030116 US 2001903936 20010712 US 20030014738 Α1 Α 200337 US 2001903936 US 6839892 20050104 B2 Α 20010712 200503

Priority Applications (no., kind, date): US 2001903936 A 20010712

# Patent Details

Dwg Number Kind Filing Notes Lan Рg US 20030014738 A1 EN

### Alerting Abstract US A1

NOVELTY - The extensions such as application programming interface calls are established within an operating system debugger of a logically partitioned data processing system. The extensions are utilized to debug the partition management firmware.

DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- 1.computer program product for debugging partition management firmware; and
- 2.logically partitioned data processing system.

USE - For debugging partition management firmware which is also known as hypervisor for logically partitioned data processing system (claimed). ADVANTAGE - Enables debugging partition management firmware without the need to develop a dedicated partition management firmware debugger. Hence the system development time and expense are reduced.

DESCRIPTION OF DRAWINGS - The figure shows a flowchart explaining the partition management firmware debugging method.

Title Terms/Index Terms/Additional Words: PARTITION; MANAGEMENT; FIRMWARE; DEBUG; METHOD; DATA; PROCESS; SYSTEM; ESTABLISH; EXTEND; APPLY; PROGRAM; INTERFACE; CALL; OPERATE

## Class Codes

International Classification (Main): G06F-009/44
US Classification, Issued: 717131000, 709328000, 717124000, 717126000, 711140000, 711153000, 714004000, 714025000

File Segment: EPI; DWPI Class: T01; T03

Manual Codes (EPI/S-X): T01-F05G5; T01-J20C; T01-S03; T03-P01

## 9/5/27 (Item 27 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0013776384 - Drawing available WPI ACC NO: 2003-875709/200381 XRPX Acc No: N2003-699238

Input-output facility sharing method in data processing system, involves copying data loaded on remote table, created for hosted position to standard table of hosting partition, to allow hosted partition to access facilities

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNDT R L

Patent Family (3 patents, 2 countries)

Application Kind Update Number Kind Date Number Date 200381 20031030 US 2002132461 A 20020425 US 20030204648 A1 В 20040420 US 2002132461 A 20020425 US 6725284 B2 200427 TW 200403568 Α 20040301 TW 2003109268 A 20030421 200568

Priority Applications (no., kind, date): US 2002132461 A 20020425

## Patent Details

Number Kind Lan Pg Dwg Filing Notes US 20030204648 A1 EN 16 8 TW 200403568 A ZH

## Alerting Abstract US A1

NOVELTY - The data is loaded on remote translation control entry (RTCE) table that is created on operating system, hosted **partitions** (203,205,207,209) that share input/output facilities e.g. disk adapter, tape drive owned by hosting logical **partition** (230). The loaded data is copied on standard translation control entry table of hosting **partition**, based on which hosted **partition** accesses input/output facilities of **part**ition.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following;.

- 1.data processing system; and
- computer program product comprising recorded medium storing facility sharing program.

```
USE - For sharing input/output facilities including input/output adapter,
disk adapter, tape disk, compact disk and digital visible disk driver,
token ring adapter, Internet adapter, serial port, terminal on timer
device.
  ADVANTAGE - The overhead involved in performing input/output operations
in logically partitioned data processing system is reduced effectively
using simple and reliable facility sharing method. Also difficulty of
reclaiming shared resources, memory consumption, error recovery and
limiting use of dedicated memory is eliminated easily.
  DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the
logically partitioned platform of data processing system.
  200 logically partitioned platform
  202,204,206,208 operating system
  203,205,207,209 partitions
  210 hypervisor
  211,213,215,217 firmware loader
  248,250,252,254,256,258,260,262 input/output adapter
Title Terms/Index Terms/Additional Words: INPUT; OUTPUT; FACILITY; SHARE;
  METHOD; DATA; PROCESS; SYSTEM; COPY; LOAD; REMOTE; TABLE; POSITION;
  STANDARD; PARTITION; ALLOW; ACCESS
Class Codes
International Classification (Main): G06F-017/00, G06F-003/00
(Additional/Secondary): G06F-012/00, G06F-012/10, G06F-013/00, G06F-015/16 US Classification, Issued: 710005000, 710005000, 710001000, 710002000,
 712013000, 712200000, 712220000
File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-F02C; T01-F05E; T01-S03
 9/5/28
            (Item 28 from file: 350)
DIALOG(R) File 350: Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.
0013774187 - Drawing available
WPI ACC NO: 2003-873454/200381
Function address protection control device for multi-processor system uses
protection control bit under logic petitioning environment
Patent Assignee: ARNDT R L (ARND-I); INT BUSINESS MACHINES CORP (IBMC);
  SHEMPERT C H (SHEM-I)
Inventor: ARNDT R L ; SHEMPERT C H
Patent Family (4 patents, 2 countries)
Patent
                               Application
Number
                Kind
                       Date
                               Number
                                              Kind
                                                     Date
                                                             Update
                     20020523
                                                A 20011102
KR 2002038479
                               KR 200168169
                 Α
                                                             200381
US 6751679
                     20040615
                               US 2000714732
                                                A
                                                   20001116
                                                             200439
                 В1
                     20040802
KR 442757
                 В
                               KR 200168169
                                                A
                                                   20011102
                                                             200480
                                                                     E
US 20050177650
                 A1
                     20050811
                               US 2000714732
                                                   20001116
                                                             200553
                               US 2003624286
                                                   20030722
                                                Α
Priority Applications (no., kind, date): US 2003624286 A 20030722; US
  2000714732 A 20001116
```

### Patent Details

Number Kind Lan Pg Dwg Filing Notes KR 2002038479 A KO 1 10

Previously issued patent KR 2002038479 KR 442757 B KΟ Division of application US 2000714732 US 20050177650 A1 EN Division of patent US 6751679

### Alerting Abstract KR A

NOVELTY - A data processing system(100) includes plural processors(101, 102, 103, 104) connected to a system bus(106). A memory controller/cache(108) providing interface for the local memories(160-163) is connected to the system bus. An input/output (I/O) bus bridge(110) is connected to the system bus for providing interface of an I/O bus(112). DESCRIPTION - A Peripheral Component Interconnect (PCI) host bridge (114)

connected to the I/O bus(112) provides interface for a PCI local bus(115). Each I/O adapter(120-121) provides interface between an I/O device and a data processing system(100).

USE - For function address protection in a multi-processor data processing system.

ADVANTAGE - Operates without re-boot or power-off of the system. DESCRIPTION OF DRAWINGS - The drawing shows a block diagram of the system.

100 data processing system

101, 102, 103, 104 processors

106 system bus

108 memory controller/cache

110 I/O bus bridge

112 I/O bus

114 PCI host bridge

115 PCI local bus

120,121 /O adapters

160-163 local memories

Title Terms/Index Terms/Additional Words: FUNCTION; ADDRESS; PROTECT; CONTROL; DEVICE; MULTI; PROCESSOR; SYSTEM; BIT; LOGIC; ENVIRONMENT

## Class Codes

International Classification (Main): G06F-012/02, G06F-003/00 US Classification, Issued: 710005000, 710003000, 709001000, 711152000, 711153000, 711163000, 711165000, 711202000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05B2; T01-G05A; T01-G05C; T01-H05B3; T01-H08; T01-M02C

#### (Item 29 from file: 350) 9/5/29

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0013730991 - Drawing available WPI ACC NO: 2003-829019/200377

XRPX Acc No: N2003-662318

Logically partitioned data processing system has terminal bridge that enables adapter to operate without interruption and to respond to load/store operations, even during failure of posted write operation

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNDT R L ; THURBER S M

Patent Family (1 patents, 1 countries) Patent. Application

Number Kind Date Number Kind

Date Update US 6643727 В1 20031104 US 2000589664 A 20000608 200377

Priority Applications (no., kind, date): US 2000589664 A 20000608

Patent Details

Number Kind Lan Pg Dwg Filing Notes US 6643727 B1 EN 9 3

## Alerting Abstract US B1

NOVELTY - The input/output adapters are assigned to logical **partitions** within a data processing system. A terminal bridge (200) enables adapter to operate without interruption and to respond to load and store operations or perform direct memory access operations, even during failure of posted write operation.

DESCRIPTION - An INDEPENDENT CLAIM is also included for logically partitioned data processing method.

USE - For processing logically **partitioned** data in data processing system such as symmetric multiprocessor (SMP) system.

ADVANTAGE - Since the terminal bridge prevents propagation of errors from I/O adapters into shared buses of other adapters, the errors are isolated from other logical partitions. The error in one partition is prevented from stopping the execution of operating system of another partition, hence the integrity of operating system in one partition is not affected by error in another partition. Since the system is logically partitioned, multiple operating systems are run simultaneously.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the terminal bridge.

- 200 terminal bridge
- 202 control state machine
- 206 output data buffer
- 208 input data buffer

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION; DATA; PROCESS; SYSTEM; TERMINAL; BRIDGE; ENABLE; OPERATE; INTERRUPT; RESPOND; LOAD; STORAGE; EVEN; FAIL; POST; WRITING

## Class Codes

International Classification (Main): G06F-013/36

(Additional/Secondary): H04L-001/00

US Classification, Issued: 710314000, 710015000, 714008000, 714043000, ... 714044000

File Segment: EPI;
DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05E; T01-M02C1

## 9/5/30 (Item 30 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0013669807 - Drawing available WPI ACC NO: 2003-766217/200372 Related WPI Acc No: 2004-068377

XRPX Acc No: N2003-613716

Logically partitioned data processing system for computer architecture, reboots data processing system associated with logical partition of data structure in which fatal data fetch error has occurred

Patent Assignee: ARNDT R L (ARND-I); INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNDT R L

Patent Family (2 patents, 1 countries)

Patent Application Date Number Kind Date Update Number Kind US 20030159086 20030821 US 2000589797 A 20000608 200372 A1 Α US 2003388076 20030313 A 20000608 US 2000589797 US 6836855 B2 20041228 200502 E US 2003388076 A 20030313

Priority Applications (no., kind, date): US 2000589797 A 20000608; US 2003388076 A 20030313

#### Patent Details

Number Kind Lan Pg Dwg Filing Notes
US 20030159086 A1 EN 18 10 Division of application US 2000589797

US 6836855 B2 EN Division of application US 2000589797

Division of patent US 6658591

## Alerting Abstract US A1

NOVELTY - A hypervisor has data structure to create and maintain separation of the logical **partitions** which are assigned to the operating systems and processors. The hypervisor reboots the data processing system associated with a logical **partition** of a data structure in which a fatal data fetch error has occurred.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.data fetch error occurrence prevention method;
- 2.computer program product for preventing data fetch error occurrence ;
- 3.data fetch error occurrence preventing system;
- 4.data recovering method;
- 5.computer program product for recovering data; and
- 6.data recovering system.

USE - For processing logically partitioned data in computer architecture.

ADVANTAGE - Isolates fatal data fetch error to a single partition within the logically partitioned data processing system.

DESCRIPTION OF DRAWINGS - The figure shows a schematic view of the ... logically partitioned data processing system.

100 distributed data processing system

102 network

104 server

106 storage unit

114,116,118 printers

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION; DATA; PROCESS; SYSTEM; COMPUTER; ARCHITECTURE; ASSOCIATE; STRUCTURE; FATAL; FETCH; ERROR; OCCUR

## Class Codes

International Classification (Main): G06F-011/00, H04L-001/22
 (Additional/Secondary): G06F-012/00

US Classification, Issued: 714025000, 714009000, 714006000, 714055000, 710200000, 711150000, 711151000, 711152000

File Segment: EPI;
DWPI Class: T01

Manual Codes (EPI/S-X): T01-F03A; T01-F05B; T01-S03

# 9/5/31 (Item 31 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0013647655 - Drawing available WPI ACC NO: 2003-743618/200370

Related WPI Acc No: 2002-328418; 2005-260611

XRPX Acc No: N2003-595507

Logically partitioned data processing system determines whether address included in direct memory address request is within range of direct memory access addresses, based on which hypervisor approves data transmission

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNDT R L ; THURBER S M

Patent Family (1 patents 1 countries

Patent Family (1 patents, 1 countries)
Patent Application

Number Kind Date Number Kind Date Update US 6629162 B1 20030930 US 2000589665 A 20000608 200370 B

Priority Applications (no., kind, date): US 2000589665 A 20000608

#### Patent Details

Number Kind Lan Pg Dwg Filing Notes

US 6629162 B1 EN 13 6

## Alerting Abstract US B1

NOVELTY - A hypervisor upon receiving a direct memory access (DMA) request, determines whether an address included in the DMA request is within a range of DMA addresses with respect to an input/output (I/O) adapter. The hypervisor rejects the request and prevents transmission of data between the I/O adapter and memory locations, based on the determination.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.data access prevention method;
- 2.computer program product for preventing data access; and
- 3.data access prevention system.

USE - Logically **partitioned** data processing system e.g. multiprocessor data processing system.

ADVANTAGE - Prevents I/O used by an operating system (OS) within a logically **partitioned** system, from corrupting or fetching data from other operating system. The hypervisor initializes all entries in the input output adapter, such that unauthorized access will not cause an error that will not cause an error that will affect another operating system.

DESCRIPTION OF DRAWINGS - The figure shows the flow chart explaining the operation of logically **partitioned** data processing system.

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION; DATA; PROCESS; SYSTEM; DETERMINE; ADDRESS; DIRECT; MEMORY; REQUEST; RANGE; ACCESS; BASED; TRANSMISSION

## Class Codes

International Classification (Main): G06F-013/28

US Classification, Issued: 710028000, 710023000, 710026000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-H05; T01-S03

# 9/5/32 (Item 32 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0012940606 - Drawing available WPI ACC NO: 2003-017272/200301

XRPX Acc No: N2003-013166

Logical partition computer system has virtual terminal that allows

logical partition to share communication interface, by multiplexing and routing communication from logical partitions to window for display Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC) Inventor: ARNOT R L ; FOSTER R K; LIPP W M; LUCAS K A; MCCREARY C L;

MEALEY B ; POIMBOEUF J N

4 countries) Patent Family (7 patents,

	Patent			Application				
Number		Kind	Date	Number	Kind	Date	Update	
	US 2002012415	2 A1	20020905	US 2001798296	Α	20010301	200301	В
	JP 2002328891	. A	20021115	JP 200246075	Α	20020222	200306	Ē
	KR 2002070796	A	20020911	KR 20028101	Α	20020215	200311	E
	TW 559777	Α	20031101	TW 2002103619	Α	20020227	200425	Ε
	KR 465581	В	20050113	KR 20028101	Ą	20020215	200535	E.,
	JP 3737767	B2	20060125	JP 200246075	Α	20020222	200608	E
	US 7023459	B2	20060404	US 2001798296	Α	20010301	200624	E

Priority Applications (no., kind, date): US 2001798296 A 20010301

#### Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes	
US 20020124152	A1	EN	5	1		
JP 2002328891	Α	JA	7			
TW 559777	Α	zH				
KR 465581	В	KO			Previously issued patent	KR 2002070796
JP 3737767	B2	JA	6		Previously issued patent	JP 2002328891

## Alerting Abstract US A1

NOVELTY - An external display device (16) which displays multiple windows (28) corresponding to each of logical partitions (12), is coupled to the computer system. A virtual terminal allows the logical partitions to display system menus on the display device through a communication interface (18), by multiplexing and routing the communications from each of the logical partitions to corresponding window for display. DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- 1.Logical partition computer system provision method; and
- 2.Computer readable medium storing logical partition computer system providing program.

USE - Logical partition computer system with virtual terminal. ADVANTAGE - Provides the logical partitions with the ability to share the hardware needed to display the system menus. Eliminates the need for an operator to buy hardware for each logical partition in the system. Enables an operator to maintain the entire system from one interface instead of having to use multiple displays and keyboards.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram illustrating dataflow for providing logical partition computer system with virtual terminal.

- 12 Logical partitions
  16 External display device
- 18 Communication interface
- 28 Windows

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION ; COMPUTER; SYSTEM; VIRTUAL; TERMINAL; ALLOW; SHARE; COMMUNICATE; INTERFACE; MULTIPLEX; ROUTE; WINDOW; DISPLAY

## Class Codes

International Classification (Main): G06F-013/00, G06F-015/00, G09G-005/00 (Additional/Secondary): G06F-009/46 International Classification (+ Attributes)

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IPC + Level Value Position Status Version
  G06F-0015/00 A I F B 20060101
  G06F-0003/048 A I L B 20060101
  G06F-0009/46 A I L B
                            20060101
G09G-0005/00 A I F B 20060101
US Classification, Issued: 712001000, 345764000, 718104000
File Segment: EngPI; EPI;
DWPI Class: T01; P85
Manual Codes (EPI/S-X): T01-F05B2; T01-F05E; T01-J12B; T01-S03
            (Item 33 from file: 350)
 9/5/33
DIALOG(R) File 350: Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.
0012460075 - Drawing available
WPI ACC NO: 2002-406118/200244
XRPX Acc No: N2003-624790
Logically partitioned data processing system used in network environment,
has hypervisor which emulates shared resources and provides virtual copy of
shared resources to logical partitions
Patent Assignee: ARNDT R L (ARND-I); IBM CORP (IBMC); INT BUSINESS
  MACHINES CORP
                 (IBMC)
Inventor: ARDNT R L; ARNDT R L
Patent Family (11 patents, 10 countries)
                                Application
Patent
                                                               Update
                                               Kind
                                                      Date
                                Number
Number
                Kind
                       Date
                                                               200244
                                CN 2001121454
                                                 A 20010607
                      20020102
CN 1329305
                 Α
                                                 A 20010417
                                                               200374
                                                                       ETAB
                                CA 2344597
                      20011208
CA 2344597
                 Α1
                                                 A 20010316
                                                               200250
                                BR 2001999
                                                                       Е
                      20020213
BR 200100999
                 Α
                                                 A 20010608
                                                               200250
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                                JP 2001173506
JP 2002041306
                      20020208
                 Α
                                                 A
                                                               200250
                                                                       Ε
                                KR 200131072
                                                    20010604
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                      20011215
KR 2001110999
                                                    20010605
                                                               200358
                                                                       Ε..
                      20021221
                                TW 2001113622
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TW 514784
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MX 2001005779
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                                                 Α
                 A1
                                                 A 20010601
                                                               200414
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                                SG 20013262
                      20031226
SG 100715
                 Α1
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                                                 Α
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                      20040715
US 20040139437
                 Α1
                                US 2003735403
                                                 Α
                                                    20031212
                                                 A 20010531
                                                               200574
                                                                       Ε
                      20050729
                                IN 2001CH436
IN 200100436
                  T4
                                US 2000589661
                                                               200607
                  B1 20060124
                                                 A 20000608
US 6990663
Priority Applications (no., kind, date): US 2003735403 A 20031212; US
  2000589661 A 20000608
Patent Details
                Kind
                      Lan
                            Pg
                                Dwg
                                     Filing Notes
Number
                      ZH
CN 1329305
                      PΤ
BR 200100999
                  Α
JP 2002041306
                  Α
                      JA
                            15
TW 514784
                  Α
                      7H
CA 2344597
                            25
                  Α1
                      ĖΝ
SG 100715
                  Α1
                      EN
                                     Division of application US 2000589661
US 20040139437
                      EN
                  Α1
```

## Alerting Abstract CA A1

Ι4

EN

IN 200100436

NOVELTY - The data processing system has number of operating systems each of which are assigned to number of logical partitions. The resources such as console, operator panel are assigned to the logical partitions. A hypervisor emulates shared resources and provides a virtual copy of the shared resources to the logical partitions.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

```
1. shared resources partitioning method;
```

2.computer program product for providing separate copies of shared resources; and

3.shared resources partitioning system

USE - For use in network environment.

ADVANTAGE - The shared resources are emulated to provide a separate copy for each partition .

DESCRIPTION OF DRAWINGS - The figure shows a schematic view of the structure of distributed data processing system. (Drawing includes non-English language text).

102 network

104 server

108,110 clients

116 printer

150 hardware system console

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION; DATA; PROCESS ; SYSTEM; NETWORK; ENVIRONMENT; SHARE; RESOURCE; VIRTUAL; COPY

#### Class Codes

International Classification (Main): G06F-012/08, G06F-013/00, G06F-015/16, G06F-015/76, G06F-009/46, G06F-009/50 (Additional/Secondary): G06F-013/10, G06F-013/38, G06F-015/167, G06F-017/00, G06F-009/06 International Classification (+ Attributes) IPC + Level Value Position Status Version G06F-0012/00 A I L B 20060101 G06F-0009/455 A I F B 20060101 G06F-0009/46 A I L B 20060101 US Classification, Issued: 718100000, 718001000, 718104000, 711006000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F02C2; T01-N02B1; T01-N02B2B; T01-S03

### (Item 34 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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0012384977 - Drawing available WPI ACC NO: 2002-328418/200236

Related WPI Acc No: 2003-743618; 2005-260611

XRPX Acc No: N2002-257686

Logically partitioned data processing system restricts transmission of data between I/O adapter of one logical partition with memory location of another partition based on data operating range

Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNOT R L ; NEAL D M; THURBER S M

Patent Family (3 patents, 2 countries)

Patent Application Number Kind Date Number

Kind Date Update A 20000608 US 20020010811 A1 20020124 US 2000589665 200236 B A A US 2001766764 20010123 JP 200210686 JP 2002318701 20021031 Α 20020118 200304 US 6823404 B2 20041123 US 2001766764 A 20010123 200477

Priority Applications (no., kind, date): US 2000589665 A 20000608; US 2001766764 A 20010123

### Patent Details

Number Kind Lan Pg Dwg Filing Notes
US 20020010811 A1 EN 15 7 C-I-P of application US 2000589665
JP 2002318701 A JA 16

Alerting Abstract US A1

NOVELTY - Operating systems (402,404,406,408) and memory locations (440,442,444,446) are assigned to each logical partition. Input/output adapters (448,450,452,454,456,458,460,462) associated with logical partitions are connected to a transmission bus through a terminal bridge. A hypervisor (410) restricts transmission of data between I/O adapter of one logical partition with memory location of another partition based on the operation range.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.Prevention method of operating system image within logical partitioned
   , from corrupting data from memory location of another logical
   partition;
- 2.Computer program product

USE - Logically partitioned data processing system.

ADVANTAGE - Since the hypervisor restricts transmission of data based on operating range, the corruption of one data processing system with data received from another processing system is avoided.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of logically partitioned platform.

402,404,406,408 Operating systems

410 Hypervisor

440,442,444,446 Memory locations

448,450,452,454,456,458,460,462 Input/output adapters

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION; DATA; PROCESS; SYSTEM; RESTRICT; TRANSMISSION; ONE; MEMORY; LOCATE; BASED; OPERATE; RANGE

### Class Codes

International Classification (Main): G06F-003/00, G06F-009/46 (Additional/Secondary): G06F-012/14, G06F-013/36, G06F-015/177, G06F-003/06

US Classification, Issued: 710005000, 710036000, 710037000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05E; T01-F05G; T01-H01C3; T01-H05B2; T01-H07A2 : T01-S03

9/5/35 (Item 35 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2006 European Patent Office. All rts. reserv.

#### 00957326

Operating system provision for computer system Betriebssystemeinrichtung fur Rechnersystem

Equipment de systeme d'exploitation pour systeme d'ordinateur PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB;IE;IT) INVENTOR:

Mealey, Bruce Gerard , 3914 Amy Circle, Austin, Texas 78759, (US) Swanberg, Randal Craig, 2004 St Andrews Drive, Round Rock, Texas 78664, (US)

Williams, Michael Stephen, 11200 Barrington Way, Austin, Texas 78759-4530 , (US)

```
LEGAL REPRESENTATIVE:
  Moss, Robert Douglas (34141), IBM United Kingdom Limited Intellectual
    Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)
                             EP 867806 A2 980930 (Basic)
PATENT (CC, No, Kind, Date):
                              EP 867806 A3 981125
                              EP 98301425 980226;
APPLICATION (CC, No, Date):
PRIORITY (CC, No, Date): US 820471 970317
DESIGNATED STATES: DE; FR; GB; IE; IT
INTERNATIONAL PATENT CLASS (V7): G06F-009/445
ABSTRACT EP 867806 A2
    An improved operating system for a computer provides support for
  specific hardware components. The operating system is loaded by first
  loading a base portion which initializes the operating system and
  determines the particular type of hardware components present. Then,
  appropriate software components are loaded that are specifically
  associated with the hardware components. The hardware components can be
  detected by leaving a trace in the memory device that is associated with
  the software component and later retrieving the trace, or by testing the
  computer for the hardware component. The hardware component may be a bus
  architecture selected from a group of bus architectures, and
  bus-independent interfaces are defined which are mapped to addresses in
  the kernel. Alternatively, the software component can include a PAL which
  contains specific instructions for communicating with the hardware
  component. The PAL is constructed from a plurality of files each
  associated with the hardware component.
ABSTRACT WORD COUNT: 149
LEGAL STATUS (Type, Pub Date, Kind, Text):
                  980930 A2 Published application (Alwith Search Report
 Application:
                             ; A2without Search Report)
 Search Report:
                  981125 A3 Separate publication of the European or
                            International search report
                  990714 A2 Date of filing of request for examination:
 Examination:
                             990511
                  990804 A2 Designated Contracting States (change)
 Change:
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                      Word Count
      CLAIMS A
               (English)
                           9840
                                        402
      SPEC A
                (English)
                           9840
                                       2519
Total word count - document A
                                       2921
Total word count - document B
                                          0
Total word count - documents A + B
                                       2921
9/5/36
            (Item 36 from file: 347)
DIALOG(R) File 347: JAPIO
(c) 200% JPO & JAPIO. All rts. reserv.
            **Image avai/lable**
06137170
CONNECTION BOX FOR CAR RADIO
              11-078/10 [JP 11078710 A]
PUB. NO.:
              Narch 23, 1999 (19990323)
PUBLISHED:
              KOEPPEN JENS
INVENTOR(s):
              FRXTSCH THOMAS
              MACHA VLADIMIR
               ARNDY RUDOLF
              ROBERT BOSCH GMBH
APPLICANT(s):
              10-1955 6 [JP 98195536]
July 10, 1998 (19980710)
APPL. NO.:
FILED:
              19730048 [NE 19730048], DE (Germany), July 14, 1997
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PRIORITY:

INTL CLASS:

(19970714)

B60R-011/02

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S19
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       6:NTIS 1964-2006/Jul W5
          (c) 2006 NTIS, Intl Cpyrght All Rights Res
       8:Ei Compendex(R) 1970-2006/Jul W5
File
      (c) 2006 Elsevier Eng. Info. Inc.
34:SciSearch(R) Cited Ref Sci 1990-2006/Jul W5
File
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File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
          (c) 2006 The Thomson Corp
      35:Dissertation Abs Online 1861-2006/Jun
          (c) 2006 ProQuest Info&Learning
      65:Inside Conferences 1993-2006/Aug 09
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      94:JICST-EPlus 1985-2006/Apr W5
File
          (c)2006 Japan Science and Tech Corp(JST)
File 99:Wilson Appl. Sci & Tech Abs 1983-2006/Jul
          (c) 2006 The HW Wilson Co.
File 144: Pascal 1973-2006/Jul W3
          (c) 2006 INIST/CNRS
File 636:Gale Group Newsletter DB(TM) 1987-2006/Aug 08
          (c) 2006 The Gale Group
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S3
                SERVER? ?
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S5
      1695692
                RESOURCE? ? OR FILE OR RECORD OR CONTENT? ?
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s7
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S29
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S35
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                 IDPAT (primary/non-duplicate records only)
S36
File 348: EUROPEAN PATENTS 1978-2006/ 200632
         (c) 2006 European Patent Office
File 349:PCT FULLTEXT 1979-2006/UB=20060803,UT=20060727
         (c) 2006 WIPO/Univentio
File 350:Derwent WPIX 1963-2006/UD=200651
         (c) 2006 The Thomson Corporation
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(Item 1 from file: 349) 15/5,K/1 DIALOG(R)File 349:PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. 00784140 A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A GLOBALLY ADDRESSABLE INTERFACE IN A COMMUNICATION SERVICES PATTERNS ENVIRONMENT DE FABRICATION S'APPLIQUANT DANS UN ARTICLE PROCEDE  $\mathbf{ET}$ ENVIRONNEMENT DE STRUCTURE DE SERVICES DE COMMUNICATIONS VIA UNE INTERFACE ADRESSABLE GLOBALEMENT Patent Applicant/Assignee: ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality) Inventor(s): BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918 US. Legal Representative: HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, 1400 Page Mill Road, Palo Alto, CA 94304, US, Patent and Priority Information (Country, Number, Date): WO 200116735 A2-A3 20010308 (WO 0116735) Patent: WO 2000US24198 20000831 (PCT/WO US0024198) Application: Priority Application: US 99387214 19990831 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CU CZ DE DK DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW (EA) AM AZ BY KG KZ MD RU TJ TM Main International Patent Class (v7): G06F-009/46 Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 150371

### English Abstract

A system, method, and article of manufacture are provided for delivering service via a globally addressable interface. A plurality of interfaces are provided with access allowed to a plurality of different sets of services from each of the interfaces. Each interface has a unique set of services associated therewith. Each of the interfaces is named with a name indicative of the unique set of services associated therewith. The names of the interfaces are then broadcast to a plurality of systems requiring service.

## French Abstract

L'invention porte sur un systeme, un procede et un article de fabrication appliques dans la distribution de services via une interface adressable globalement. Une pluralite d'interfaces permettent d'acceder a une pluralite de differents ensembles de services. A chaque interface est associe un ensemble unique de services. Chacune de ces interfaces est affectee d'un nom designant l'ensemble unique de services correspondant. Les noms des interfaces sont ensuite diffuses a une pluralite de systemes requerant un service.

Legal Status (Type, Date, Text) Publication 20010308 A2 Without international search report and to be republished upon receipt of that report.

20010927 Request for preliminary examination prior to end of 19th month from priority date Examination

20030109 Late publication of international search report Search Rpt

Republication 20030109 A3 With international search report.

Fulltext Availability: Detailed Description

Detailed Description ... transaction.

> Possible Product Options Tuxedo; Encina; TOP END; CICS/6000; openUTM; TransIT Open/OLTP Transaction Partitioning 2608 Transaction Partitioning Services provide support for mapping a single logical transaction in an application into the required multiple physical transactions. For example, in a package...

15/5,K/2 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corporation. All rts. reserv.

0015231810 - Drawing available WPI ACC NO: 2005-581874/200559

XRPX Acc No: N2005-477482

Shared resource management method in logical partitioned data processing system, involves providing logical resource corresponding to physical resource to client partition, and mapping with physical resource by client partition

Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC)

Inventor: ARNDT R L; MEALEY B G; THURBER S M

Patent Family (2 patents, 2 countries)

Patent Application

Number Kind Date Number Kind Date Update A 20040212 200559 A1 20050818 US 2004777724 US 20050182788 CN 1655123 20050817 CN 200510006424 A 20050131 200572 E Α

Priority Applications (no., kind, date): US 2004777724 A 20040212

#### Patent Details

y . harrie

Number Kind Lan Pg Dwg Filing Notes US 20050182788 A1 EN 13 5

Alerting Abstract US A1

NOVELTY - A logical resource corresponding to physical resource is provided to a client partition and is mapped with physical resource by the client partition in the logical partitioned data processing system.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.logical partitioned data processing system; and
- 2.computer program product for managing shared resources.

USE - For managing shared resources in logical partitioned (LPAR) data processing system (claimed).

ADVANTAGE - Prevents new virtual to physical mappings of logical resources effectively.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the data processing system.

Title Terms/Index Terms/Additional Words: SHARE; RESOURCE; MANAGEMENT; METHOD; LOGIC; PARTITION; DATA; PROCESS; SYSTEM; CORRESPOND; PHYSICAL; CLIENT; MAP

#### Class Codes

International Classification (Main): G06F-017/00, G06F-009/46 US Classification, Issued: 707103R00

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-F02C; T01-N02A2C; T01-S03

...resource management method in logical partitioned data processing system, involves providing logical resource corresponding to physical resource to client partition, and mapping with physical resource by client partition

...NOVELTY - A logical resource corresponding to physical resource is provided to a client partition and is mapped with physical resource by the client partition in the logical partitioned data...

Original Publication Data by Authority

## Claims:

...logical resource to a client partition in the logical partitioned data processing system, wherein the logical resource corresponds to a physical resource; andmapping, by the client partition, the logical resource to the physical resource.

19/5, K/1 (Item 1 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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0015859577 - Drawing available WPI ACC NO: 2006-391267/200640

XRPX Acc No: N2006-327767

Data access service provision system for web application, uses topology stored in databases to determine one database that satisfies data request from client application

Patent Assignee: MICROSOFT CORP (MICT)

Inventor: BARROWS B J; CHITPHAKDIBODIN S; SHUTT D

Patent Family (1 patents, 1 countries)
Patent Application

Number Kind Date Number Kind Date Update US 7058958 B1 20060606 US 2002128060 A 20020423 200640 B

Priority Applications (no., kind, date): US 2002128060 A 20020423

#### Patent Details

Number Kind Lan Pg Dwg Filing Notes. US 7058958 B1 EN 19 10

### Alerting Abstract US B1

NOVELTY - The system comprises two database in which a topology comprising mapping of logical partitions to physical partitions, are stored. A client programming model determines the database that satisfies the data request from the client application according to the desired state of data, using the topology, to access data.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.method of providing data access to client application;
- 2.computer readable medium storing data access service providing program; and
- 3.method of communicating between client applications.

USE - For web application.

ADVANTAGE - The replicas of data along with data location and data freshness is provided, without having to change the underlying applications that initially request the data. Failover, routing and monitoring service are performed effectively.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the data access service provision system.

Title Terms/Index Terms/Additional Words: DATA; ACCESS; SERVICE; PROVISION; SYSTEM; WEB; APPLY; TOPOLOGICAL; STORAGE; DETERMINE; ONE; DATABASE; SATISFY; REQUEST; CLIENT

### Class Codes

International Classification (+ Attributes)
IPC + Level Value Position Status Version
 G06F-0017/30 A I F B 20060101

US Classification, Issued: 719328000, 707001000, 709217000, 711100000

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-G03; T01-J05B4A; T01-J05B4M; T01-N02A3C; T01-N03B5; T01-S03

...NOVELTY - The system comprises two database in which a topology comprising mapping of logical partitions to physical partitions, are stored. A client programming model determines the database that satisfies the data request from the client application according...

19/5,K/2 (Item 2 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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0014854282 - Drawing available

WPI ACC NO: 2005-201986/

XRPX Acc No: N2005-166260

Logical partition resource expansion method for computer, involves providing grid and on-demand resources to logical partition, based upon usage of partition and grid resources when grid resources are available to logical partition

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: BIRKESTRAND D C; GRIMM R L; SCHARDT T L

Patent Family (1 patents, 1 countries)

Patent

Application

Number Kind Date Number Kind US 20050044228 A1 20050224 US 2003645125

Kind Date Update A 20030821 200521 B

Priority Applications (no., kind, date): US 2003645125 A 20030821

Patent Details

Number Kind Lan Pg Dwg Filing Notes

US 20050044228 A1 EN 20 5

Alerting Abstract US A1

NOVELTY - The grid resources are provided from the grid to the logical partition, based upon usage of the partition resources. The on-demand resources are provided to the logical partition, based upon the usage of partition resources and grid resources, when the grid resources are available to the logical partition.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.apparatus for expanding resources available to logical partition;
- 2.computer readable medium storing program performing operation of expanding resources available to logical partition;
- 3.method for managing and controlling allocation of resources of logical partition; and
- 4.computer application deployment method.

USE - For expanding resources available on computers.

ADVANTAGE - Provides more flexibility to host service providers and clients, without incurring costs of the system.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the logically partitioned system.

Title Terms/Index Terms/Additional Words: LOGIC; PARTITION; RESOURCE;

EXPAND; METHOD; COMPUTER; GRID; DEMAND; BASED; AVAILABLE

Class Codes

International Classification (Main): G06F-015/173

(Additional/Secondary): G06F-015/167

US Classification, Issued: 709226000, 709213000

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05E; T01-F05G5; T01-N01A; T01-N01D; T01-N02A2; T01-S03

Original Publication Data by Authority

Original Abstracts:

Methods, systems, and media to expand resources available to logical partition associated with a client are contemplated. Embodiments may associate the logical partition with a grid that retains a list of resources, referred to as grid resources... Claims:

What is claimed is: b 1 /b . A method for expanding resources available to a logical partition associated with a client , the method comprising: associating partition resources of the logical partition with a grid; providing grid resources from the grid to the logical partition based...

19/5,K/4 (Item 4 from file: 350)

DIALOG(R) File 350: Derwent WPIX

(c) 2006 The Thomson Corporation. All rts. reserv.

0007711049 - Drawing available WPI ACC NO: 1996-333508/199633

XRPX Acc No: N1996-281098

Shared-memory computer system having coupled processing nodes - has data processor for each processing node to execute software instructions, main memory cache connected by processor cache to data processor, and directory memory

Patent Assignee: UNIV STANFORD (STRD)

Inventor: GUPTA A; JOE T

Patent Family (1 patents, 1 countries)
Patent Application

Number Kind Date Number Kind Date Update
US 5535116 A 19960709 US 199363628 A 19930518 199633 B

Priority Applications (no., kind, date): US 199363628 A 19930518

Patent Details

Number Kind Lan Pg Dwg Filing Notes

US 5535116 A EN 22 13

### Alerting Abstract US A

The computer system includes a number of home processing nodes assigned from the processing nodes, with each data item in the global shared memory space assigned to a home processing node based on the address of the respective data item, and a master processing node from the processing nodes for a data item in the global shared memory space, where a current copy of the data item is stored, with at least one data item in the global shared memory space having its home processing node different from its master processing node. A home directory memory for each home processing node, located at the home processing node centralises directory information for each data item assigned to the home processing node.

The directory information comprises an indication of the current state of the data item, including, a pointer to the master processing node for the data item, the master processing node being the processing node having a master copy of the data item, and a list of sharer nodes, each having a copy of the data item.

The assignments of home processing nodes are essentially uniformly

distributed among processing nodes.

USE/ADVANTAGE - Provides tightly-

USE/ADVANTAGE - Provides tightly-coupled shared memory computer system having cache-based architecture that does not rely on hierarchical directory structure, and uses attraction memory cache or flat directory-based cache coherence protocol, which uses flat directory organisation.

Title Terms/Index Terms/Additional Words: SHARE; MEMORY; COMPUTER; SYSTEM; COUPLE; PROCESS; NODE; DATA; PROCESSOR; EXECUTE; SOFTWARE; INSTRUCTION; MAIN; CACHE; CONNECT; DIRECTORY

#### Class Codes

International Classification (Main): G05B-015/00 US Classification, Issued: 364134000, 364131000, 395200080

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-H08

Original Publication Data by Authority

# Original Abstracts:

...flat cache-only multi-processor architecture. Directory memories are uniformly distributed among all the processor **nodes**. Every valid memory **partition** has an **associated physical** address, which is used to determine a statically assigned home node for that partition. The...

19/5,K/5 (Item 5 from file: 350)

DTALOG(R) File 350: Derwent WPIX

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0005231750

WPI ACC NO: 1990-224635/199029

XRPX Acc No: N1990-174258

Distributed processing system for digital computer - has translator to converter local bus memory addresses to secondary interconnect bus memory addresses for data distribution

Patent Assignee: FLASHPOINT COMPUTER (FLAS-N); FLASHPOINT COMPUTER CORP (FLAS-N)

Inventor: HILPERT E J; PARRISH O C; PEIFFER R E; THOMAS J H

Patent Family (2 patents, 14 countries)

Application

Number Number Kind Date Kind Date Update WO 1990007154 WO 1989US5527 19900628 19891215 199029 Α Α US 5117350 Α 19920526 US 1988284529 Α 19881215

Priority Applications (no., kind, date): US 1988284529 A 19881215

#### Patent Details

Kind Lan Pg Dwg Filing Notes

WO 1990007154 Α EN

National Designated States, Original: JP KR Regional Designated States, Original: AT BE CH DE ES FR GB IT LU NL SE

US 5117350 EN 23

### Alerting Abstract WO A

A dynamically configurable memory addressable as local bus memory has three software created classes of memory, distributed common, shared global and remote global, which may be located anywhere in a distributed system architecture. A translation device has partitioning RAMs located at each functional unit and is used to convert local bus memory addresses to secondary interconnect bus memory addresses for data distribution.

A memory partition may be located in any functional unit and may have the same system address as other functional units, thereby allowing read cycles for shared data to execute at local bus speeds. Allocation of memory is synchronised by messages broadcast via a common bus and by partitioning software operating under distributed control.

ADVANTAGE - Allows direct data sharing and task distribution. @(65pp Dwg.No.2/14)@

## Equivalent Alerting Abstract US A

The computer system has several nodes interconnected by a common broadcast bus. Each node has memory and at least one node has a processor. The system has a dynamically configurable memory which may be located within the system address space of a distributed system architecture including memory within each node having a processor and the memory resident within other nodes. The memory in the system address space is addressable by system physical addresses which are isolated from the physical addresses for memory in each node.

The node physical addresses are translatable to and from the system physical addresses by partition maps located in partition tables at each node . Memory located anywhere in the distributed system architecture may be partitioned dynamically and accessed on a local basis by programming the partition tables, stored in partitioning RAMs.

USE/ADVANTAGE - In partitioning process. Permits data to be duplicated throughout a distributed system architecture and permits read cycles for shared data to execute at local bus speeds.

Title Terms/Index Terms/Additional Words: DISTRIBUTE; PROCESS; SYSTEM; DIGITAL; COMPUTER; TRANSLATION; CONVERTER; LOCAL; BUS; MEMORY; ADDRESS; SECONDARY; INTERCONNECT; DATA

### Class Codes

International Classification (Main): G06F-012/06
 (Additional/Secondary): G06F-012/08, G06F-015/16
US Classification, Issued: 395425000, 364DIG, 364238000, 364240000,
 364240100, 364240800, 364242200, 364242300, 364242940, 364242950,
 364243000, 364243400, 364243410, 364244000, 364244600, 364245000,
 364252000, 364282100, 364282400, 364284400

File Segment: EPI; DWPI Class: T01

Manual Codes (EPI/S-X): T01-H01

Equivalent Alerting Abstract ... The node physical addresses are translatable to and from the system **physical** addresses by partition **maps** located in **partition** tables at each **node**. Memory located anywhere in the distributed system architecture may be partitioned dynamically and accessed on ...

### Original Publication Data by Authority

### Original Abstracts:

...memory in each node. The node physical addresses are translatable to and from the system **physical** addresses by partition **maps** located in **partition** tables at each **node**. Memory located anywhere in the distributed system architecture may be partitioned dynamically and accessed on...

...

(Item 6 from file: 348) DIALOG(R) File 348: EUROPEAN PATENTS (c) 2006 European Patent Office. All rts. reserv. Auxiliary translation lookaside buffer for assisting in accessing data in 00893559 remote address spaces Zusatz-Adressenubersetzungspuffer zur Unterstutzung von Datenzugriffen in entfernten Adressenraumen Tampon auxiliaire de traduction d'adresses pour aider l'acces a des donnees dans des espaces d'adresses a distance PATENT ASSIGNEE: Sun Microsystems, Inc., (2616592), 4150 Network Circle, Santa Clara, California 95054, (US), (Proprietor designated states: all) **TNVENTOR:** Vishin, Sanjay, 1055 Manet Avenue, Apt. 89, Sunnyvale, California 94087, Aybay, Gunes, 1105 El Camino Real, Apt. 1, Burlingame, California 94010, (US) LEGAL REPRESENTATIVE: Harris, Ian Richard et al (72231), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB) EP 817059 A1 980107 (Basic) PATENT (CC, No, Kind, Date): EP 817059 B1 030827 EP 97304324 970619; APPLICATION (CC, No, Date): PRIORITY (CC, No, Date): US 669979 960625 DESIGNATED STATES: DE; FR; GB; IT; NL; SE INTERNATIONAL PATENT CLASS (V7): G06F-012/02; G06F-012/10 CITED PATENTS (EP B): EP 497600 A; WO 95/16964 A; US 4473878 A ABSTRACT EP 817059 A1 A computer system includes a data processor, a primary translation

lookaside buffer for storing page table entries and translating virtual addresses into physical addresses, local memory coupled to the data processor for storing data and computer programs at specified physical addresses, and remotely located memory coupled to the data processor by a computer network for storing data at specified remote physical addresses. The computer system further includes a remote translation lookaside buffer (RTLB) that stores a plurality of remote page table entries. Each remote page table entry represents a mapping between a range of physical addresses and a corresponding range of remote physical addresses. The primary translation lookaside buffer translates a virtual address asserted by the data processor into a physical address. When the physical address does not correspond to a location in the local memory, the RTLB determines whether the physical address matches at least one of the remote page table entries stored in the RTLB, and selects one of those remote page table entries when at least one match is found. The RTLB's selection circuitry selects a single remote page table entry in accordance with predefined RPTE selection criteria when two or more of the remote page table entries match the physical address. Then, a remote physical address is generated by combining a portion of the selected remote page table entry with a portion of the physical address. ABSTRACT WORD COUNT: 231

Figure number on first page: 1

NOTE:

سلاداء الرامي

LEGAL STATUS (Type, Pub Date, Kind, Text):
Examination: 020424 A1 Date of dispatch of the first examination report: 20020311

Application: 980107 A1 Published application (A1with Search Report ;A2without Search Report)

Change: 060405 B1 Title of invention (French) changed: 20060405

Change: 060405 B1 Title of invention (English) changed: 20060405

Change: 060405 B1 Title of invention (German) changed: 20060405

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040728 B1 Date of lapse of European Patent in a
 Lapse:
                             contracting state (Country, date):
                              20031128, NL 20030827, SE 20031127,
                   040728 B1 Date of lapse of European Patent in a
 Lapse:
                             contracting state (Country, date): DE
                              20031128, NL 20030827, SE 20031127,
                   040324 B1 Date of lapse of European Patent in a
 Lapse:
                              contracting state (Country, date): NL
                              20030827,
 Assignee:
                   030423 Al Transfer of rights to new applicant: Sun
                             Microsystems, Inc. (2616592) 4150 Network
Circle Santa Clara, California 95054 US
                   030827 B1 Granted patent
 Grant:
                   040414 B1 Date of lapse of European Patent in a
 Lapse:
                              contracting state (Country, date): NL
                              20030827, SE 20031127,
                   040818 B1 No opposition filed: 20040528
 Oppn None:
                   040818 B1 No opposition filed: 20040528
 Oppn None:
                   980304 Al Inventor (change)
 Change:
                   980708 Al Date of filing of request for examination:
 Examination:
                             980513
                   980916 A1 Designated Contracting States (change)
 Change:
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
                                       Word Count
Available Text Language
                            Update
      CLAIMS A
                 (English)
                            199802
                                          1265
      CLAIMS B
                                        1315
                 (English)
                             200335
      CLAIMS B
                             200335
                                        1257
                  (German)
      CLAIMS B
                  (French)
                            200335
                                        1565
      SPEC A
                 (English)
                            199802
                                          4263
      SPEC B
                 (English)
                            200335
                                        4617
Total word count - document A
                                        5529
Total word count - document B
                                        8754
Total word count - documents A + B
                                       14283
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4 . . Fm

...SPECIFICATION memory in each node. The node physical addresses are translatable to and from the system **physical** addresses by partition **maps** located in **partition** tables at each **node**.

US 5247629 discloses a multiprocessor system having global data

US 5247629 discloses a multiprocessor system having global data replication in each of the local...

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(Item 7 from file: 349)
19/5,K/7
DIALOG(R) File 349: PCT FULLTEXT
(c) 2006 WIPO/Univentio. All rts. reserv.
            **Image available**
APPARATUS, SYSTEM, AND METHOD FOR FACILITATING STORAGE MANAGEMENT
APPAREIL, SYSTEME ET PROCEDE POUR FACILITER LA GESTION DE MEMOIRE
Patent Applicant/Assignee:
  INTERNATIONAL BUSINESS MACHINES CORPORATION, New Orchard Road, Armonk,
    New York 10504, US, US (Residence), US (Nationality), (For all
    designated states except: US)
  IBM UNITED KINGDOM LIMITED, PO Box 41 North Harbour, Portsmouth Hampshire
    PO6 3AU, GB, GB (Residence), GB (Nationality), (Designated for: MG)
Patent Applicant/Inventor:
  HICKMAN John Edward, 20150 Belma Court, Salinas, California 93907, US, US
    (Residence), US (Nationality), (Designated only for: US)
  RANGANATHAN Kesavaprasath, 1103 Hudson Harbor Drive, Poughkeepsie, New
    York 12601, US, US (Residence), IN (Nationality), (Designated only for:
  SCHMIDT Michael Anthony, 113 Pine Bush Road, Stone Ridge, New York 12484,
    US, US (Residence), US (Nationality), (Designated only for: US)
  VAN GUNDY Steven Richard, 770 Nicole Court, Gilroy, California 95020-6809
    , US, US (Residence), US (Nationality), (Designated only for: US)
Legal Representative:
  LITHERLAND David Peter (agent), IBM United Kingdom Limited, Intellectual
Property Law, Hursley Park, Winchester Hampshire SO21 2JN, GB Patent and Priority Information (Country, Number, Date):
Patent: WO 200640264 A1 20060420 (WO 0640264)
                         WO 2005EP54903 20050929 (PCT/WO EP2005054903)
  Application:
  Priority Application: US 2004963086 20041012
Designated States:
(All protection types applied unless otherwise stated - for applications
  AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM
  DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KM KP KR KZ
  LC LK LR LS LT LU LV LY MA MD MG MK MN MW MX MZ NA NG NI NO NZ OM PG PH
  PL PT RO RU SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC VN
  YU ZA ZM ZW
  (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LT LU LV MC NL
  PL PT RO SE SI SK TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
International Patent Class (v8 + Attributes)
IPC + Level Value Position Status Version Action Source Office:
  G06F-0017/30
                   A I F B 20060101
Publication Language: English
Filing Language: English
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Fulltext Availability: Detailed Description

Claims

Fulltext Word Count: 11605

#### English Abstract

An apparatus, system, and method are provided for facilitating storage management through organization of storage resources. The apparatus includes a configuration module that configures a first logical entity and a second logical entity to interact with each other in a peer-to-peer domain such that each logical entity mirrors operations of, and is in direct communication with, the other logical entity. An information module exposes local resources of the first logical entity and local resources of the second logical entity to a management node such that the local resources are available as target resources of a management command from the management node. An address module selectively addresses a

management command from the management node towards a local resource of the first logical entity and/or a local resource of the second logical entity as determined by the type of management command. French Abstract

La presente invention concerne un appareil, un systeme et un procede devant faciliter la gestion de memoire par le biais de l'organisation des ressources memoire. L'appareil comporte un configurateur qui met deux entites logiques en interaction entre elles dans un domaine d'homologues de facon que chacune fasse une replique miroir des operations de l'autre avec laquelle elle est aussi en communication directe. Un module d'information soumet les ressources locales des deux entites logiques a un noeud de gestion de facon qu'elles soient disponibles comme ressources cibles d'une commande de gestion provenant du noeud de gestion. Un adresseur designe selectivement une commande de gestion du noeud a destination d'une ressource locale de l'une au moins des deux ressources conformement a ce qui est specifie par le type de commande de gestion.

Legal Status (Type, Date, Text)
Publication 20060420 A1 With international search report.
Publication 20060420 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Fulltext Availability: Detailed Description

Detailed Description

.. logical

entities may be related to provide redundancy of hardware dedicated to each of the logical entities. Logical entities may correspond to logical

nodes , virtual machines, Logical Partitions (LPARS), Storage
Facility

Images (SFIs), Storage Application Images (SAIs), and the like. Logical entities of...

(Item 8 from file: 349) 19/5,K/8 DIALOG(R) File 349: PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. \*\*Image available\*\* 00938104 REMOTE COMPUTER FORENSIC EVIDENCE COLLECTION SYSTEM AND PROCESS SYSTEME ET PROCEDE DE COLLECTE DE PREUVES LEGALES PAR ORDINATEUR SATELLITE Patent Applicant/Assignee: SECURIFY INC, 1157 San Antonio Road, Mountain View, CA 94043, US, US (Residence), US (Nationality) Inventor(s): DE LA GARZA Joel, 3553 Alma Apt., 3, Palo Alto, CA 94304, US, Legal Representative: GLENN Michael (et al) (agent), Glenn Patent Group, 3475 Edison Way, Ste. L., Menlo Park, CA 94025, US, Patent and Priority Information (Country, Number, Date): WO 200271192 A2-A3 20020912 (WO 0271192) Patent: WO 2002US6622 20020305 (PCT/WO US0206622) Application: Priority Application: US 2001800378 20010305 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW (EA) AM AZ BY KG KZ MD RU TJ TM Main International Patent Class (v7): G06F-011/60 Publication Language: English Filing Language: English Fulltext Availability: Detailed Description

English Abstract

Fulltext Word Count: 3419

Claims

The incident response team enters relevant data into a CGI template, i.e. a script. The script then generates an appropriate kernel image for the client machine (10) along with a client folder on the evidence aggregation server. This is where the data is stored, the data about the victim machine. A partition on the evidence aggregation server is also created. The client is also provided orally with a one-time password. The client then connects to the signing authority web site with the one-time password and downloades the kernel boot image onto a storage medium, such as a floppy disk. The disk image is encrypted using an encryption application such as open PGP, and the encrypted image is sent to the client (12). The client inserts the floppy disk that contains the bootable image into the victim machine, and reboots the machine from the floppy disk (14). Data are retrieved from the victim machine, streamed to the evidence aggregation server (18) via an SSL connection, stored at the evidence aggregation server (18) to a hard drive of the victim machine, and processed (16). A message digest is written across the secure connection to a disk on the secure server (24). Hashes are sent to trusted party via the ss1 (26 and 28) and compared to the original hash from the compromised machine. Timestamps are also taken and written to the disk on the secure server (18). The disk on the secure server (18) is removed and a chain of custody is created (22). The evidence is stored in a secure location (20).

### French Abstract .

La presente invention concerne un systeme de collecte de preuves legales par ordinateur satellite permettant aux professionnels de reponse

d'incidents de collecter des donnees de clients, a distance, tout en obeissant a des normes probatoires strictes, par verification automatique du contenu recu avec les donnees de la machine victime.

Legal Status (Type, Date, Text)
Publication 20020912 A2 Without international search report and to be republished upon receipt of that report.

20030220 Late publication of international search report Republication 20030220 A3 With international search report.

Fulltext Availability: Detailed Description

Detailed Description

18.

time SSL certificates - mod-ssl implementation,

3. Multiple disk support is enabled so that each client can have a Vhome/ client for example) that maps to a removable physical device

4. The Web server has a CGI front end that is used over...

(Item 9 from file: 349) 19/5,K/9 DIALOG(R) File 349: PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. \*\*Image available\*\* 00906087 METHOD AND APPARATUS FOR OPERATING A DATA PROCESSING SYSTEM IN A REMOTE AND DISTRIBUTED MANNER BY LOGICAL CONSOLES PROCEDE ET DISPOSITIF DESTINES A LA MISE EN OEUVRE D'UN SYSTEME DE TRAITEMENT DE DONNEES Patent Applicant/Assignee: UNISYS CORPORATION, Township Line and Union Meeting Roads, P.O. Box 500, Blue Bell, PA 19424-0001, US, US (Residence), US (Nationality) Inventor(s): WILSON Kristine J, 1766 Lake Valentine Road, Arden Hills, MN 55112, US, WIGGINS Mark A, 922 West County Road D, St. Paul, MN 55126, US, JOHNSON Gail L, 1926 Lakeaires Blvd., White Bear Lake, MN 55110, US, Legal Representative: STARR Mark T (agent), Unisys Corporation, Township Line and Union Meeting Roads, P.O. Box 500, Blue Bell, PA 19424-0001, US, Patent and Priority Information (Country, Number, Date): WO 200239270 A2-A3 20020516 (WO 0239270) Patent: WO 2001US51333 20011107 (PCT/WO US0151333) Application: Priority Application: US 2000708323 20001108 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) BR CN JP KR (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR Main International Patent Class (v7): G06F-009/46 International Patent Class (v7): G06F-011/273; G06F-009/445; G06F-009/44 Publication Language: English

Fulltext Word Count: 5190

Filing Language: English Fulltext Availability: Detailed Description

### English Abstract

Claims

A method and apparatus for operating a data processing system. The data processing system hosts an operating system which is coupled to a management interface processor. The management interface processor is further coupled to a network along with a plurality of workstations. One or more logical console objects are instantiated on the management interface processor. Respectively associated with and coupled to the one ore more logical console objects are one or more instances of a system operations program. The instances of the system operations programs provide a user-interface for console level operations of the data processing system. The instances of the system operations program can be rehosted amongst the workstations, thereby aiding in workload balancing and resiliency.

### French Abstract

L'invention concerne un procede et un dispositif destines a la mise en oeuvre d'un systeme de traitement de donnees. Ce systeme de traitement de donnees heberge un systeme d'exploitation couple a un processeur d'interface de gestion. Le processeur d'interface de gestion est egalement couple a un reseau ainsi qu'a une pluralite de postes de travail. Un ou plusieurs objets de pupitre logique sont instancies au niveau du processeur d'interface de gestion. Une ou plusieurs instances d'un programme d'exploitation systeme sont respectivement associees et couplees aux objets de pupitre logique. Les instances de ce programme d'exploitation systeme fournissent une interface utilisateur pour des operations pupitre destinees au systeme de traitement de donnees. Les dites instances peuvent etre rehebergees au niveau des postes de travail, d'ou un meilleur equilibrage de la charge de travail et une

resilience amelioree.

Legal Status (Type, Date, Text)
Publication 20020516 A2 Without international search report and to be republished upon receipt of that report.

20021010 Late publication of international search report

Republication 20021010 A3 With international search report.

Republication 20021010 A3 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

20030213 Request for preliminary examination prior to end of 19th month from priority date Examination

Fulltext Availability: Detailed Description

Detailed Description

... associated instance of the system operations program. That is, the management interface processor tracks which logical consoles are associated with which partitions and on which workstations the instances of the system operations program execute.

The console views 108 are GUIs that...

(Item 10 from file: 349) DIALOG(R) File 349: PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. \*\*Image available\*\* 00784185 A SYSTEM AND METHOD FOR STREAM-BASED COMMUNICATION IN A COMMUNICATION SERVICES PATTERNS ENVIRONMENT SYSTEME, PROCEDE ET ARTICLE DE PRODUCTION FOURNISSANT UN SYSTEME DE COMMUNICATION EN CONTINU DANS UN ENVIRONNEMENT DE CONFIGURATIONS DE SERVICES DE COMMUNICATION Patent Applicant/Assignee: ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality) Inventor(s): BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918 Legal Representative: HICKMAN Paul L (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303-0746, US, Patent and Priority Information (Country, Number, Date): WO 200117195 A2-A3 20010308 (WO 0117195) Patent: WO 2000US24125 20000831 (PCT/WO US0024125) Application: Priority Application: US 99386717 19990831 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW (EA) AM AZ BY KG KZ MD RU TJ TM Main International Patent Class (v7): H04L-029/06 International Patent Class (v7): G06F-017/22; H04L-029/12 Publication Language: English Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 150532

### English Abstract

A system, method, and article of manufacture are disclosed for providing a stream-based communication system. A shared format is defined on interface code for a sending system and a receiving system. A message to be sent from the sending system to the receiving system is translated based on the shared format. Once translated, the message is then sent from the sending system and received by the receiving system. Once the message is received by the receiving system, the message is then translated based on the shared format.

## French Abstract

L'invention concerne un systeme, un procede et un article de production fournissant un systeme de communication en continu. Un format partage est defini selon un code d'interface pour un systeme emetteur et un systeme recepteur. Un message devant etre envoye par le systeme emetteur est traduit sur la base du format partage. Une fois traduit, le message est envoye du systeme emetteur et recu par le systeme recepteur. Le message recu par le systeme recepteur est ensuite traduit sur la base du format partage.

Legal Status (Type, Date, Text)

Publication 20010308 A2 Without international search report and to be republished upon receipt of that report. 20010907 Request for preliminary examination prior to end of 19th month from priority date Examination

20011115 Late publication of international search report Search Rpt Republication 20011115 A3 With international search report.

Fulltext Availability: Detailed Description

Detailed Description

... Tuxedo; Encina; TOP END; CICS/6000; openUTM; TransIT Open/OLTP Transaction Partitioning 2608 201

Transaction Partitioning Services provide support for mapping a single logical transaction in an application into the required multiple physical transactions. For example, in a package...

(Item 13 from file: 349) 19/5,K/13 DIALOG(R) File 349: PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. 00777022 METHOD AND ARTICLE OF MANUFACTURE FOR AN E-COMMERCE BASED SYSTEM, ARCHITECTURE SYSTEME, PROCEDE ET ARTICLE DE PRODUCTION POUR UNE ARCHITECTURE BASEE SUR LE COMMERCE ELECTRONIQUE Patent Applicant/Assignee: AC PROPERTIES BV, Parkstraat 83, NL-2514 JG 'S Gravenhage, NL, NL (Residence), NL (Nationality), (For all designated states except: US) Patent Applicant/Inventor: UNDERWOOD Roy A, 4436 Hearthmoor Court, Long Grove, IL 60047, US, US (Residence), US (Nationality), (Designated only for: US) Legal Representative: HICKMAN Paul L (et al) (agent), Hickman Coleman & Hughes, LLP, P.O. Box 52037, Palo Alto, CA 94303-0746, US, Patent and Priority Information (Country, Number, Date): WO 200109794 A2-A3 20010208 (WO 0109794) WO 2000US20704 20000728 (PCT/WO US0020704) Application: Priority Application: US 99364734 19990730 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW (EA) AM AZ BY KG KZ MD RU TJ TM Main International Patent Class (v7): G06F-009/46 International Patent Class (v7): G06F-009/44; G06F-017/30; G06F-017/60 Publication Language: English Filing Language: English

English Abstract

Claims

Fulltext Availability: Detailed Description

Fulltext Word Count: 122424 ·

A system, method and article of manufacture provide a resources e-commerce technical architecture where context objects are shared among a plurality of components executed on a transaction server. Services are also accessed within the server without a need for knowledge of an application program interface of the server. Application consistency is maintained by referencing text phrases throug a short codes framework. Additionally, a graphical user interface is also generated for the resources e-commerce technical architecture.

# French Abstract

Un systeme, un procede et un article de production fournissent une architecture technique de commerce electronique a ressources dans laquelle des objets de contexte sont partages parmi une pluralite de constituants executes sur un serveur de transactions. Il est aussi possible d'acceder a des services a l'interieur du serveur sans la necessite d'une connaissance d'une interface de programme d'application du serveur. La coherence des applications est maintenue par reference aux phrases textuelles au moyen d'une structure de codes courts. De plus, une interface utilisateur graphique est egalement generee pour l'architecture technique de commerce electronique a ressources.

Legal Status (Type, Date, Text)
Publication 20010208 A2 Without international search report and to be

republished upon receipt of that report.

20010614 Late publication of international search report

Republication 20010614 A3 With international search report.

Examination 20011101 Request for preliminary examination prior to end of 19th month from priority date

Fulltext Availability: Detailed Description

Detailed Description

٠٠. ٠٠.

... ReTA implements Transaction Management Services through Microsoft's Distributed

Transaction Manager and MTS 2

Transaction Partitioning

I 0 Description

Transaction Partitioning Services provide support for mapping a single logical transaction in an application into the required multiple physical transactions. For example, in a package...

(Item 14 from file: 349) DIALOG(R) File 349: PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. 00173698 MEMORY ADDRESS MECHANISM IN A DISTRIBUTED MEMORY ARCHITECTURE SYSTEME D'ADRESSES DE MEMOIRE DANS UNE ARCHITECTURE DE MEMOIRE REPARTIE Patent Applicant/Assignee: FLASHPOINT COMPUTER CORPORATION, Inventor(s): PARRISH Osey C, PEIFFER Robert E Jr, THOMAS James H, HILPERT Edwin J Jr, Patent and Priority Information (Country, Number, Date): WO 9007154 A1 19900628 WO 89US5527 19891215 (PCT/WO US8905527) Application: Priority Application: US 88529 19881215 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AT BE CH DE ES FR GB IT JP KR LU NL SE Main International Patent Class (v7): G06F-012/08 Publication Language: English Fulltext Availability: Detailed Description Claims Fulltext Word Count: 15357

### English Abstract

A dynamically configurable memory, which may be located anywhere in a distributed system architecture, and is addressable as local bus memory. Three classes of memory are defined: Shared Global (214), Remote Global (180), and Distributed Common (314). A translation mechanism (119) is used to convert local bus memory addresses to secondary interconnect bus memory addresses for data distribution in a distributed system. The mechanism may comprise partitioning RAMs (419) located at each functional unit, which respond to an input address and readout a stored translation address. A memory partition may be located in any functional unit and may have the same system address as memory partitions located in other functional units, thereby allowing read cycles for shared data to execute at local bus speeds. Allocation of memory is synchronized by messages broadcast one at a time via a common bus and by partitioning RAM's software operating under distributed control.

# French Abstract

Memoire a configuration dynamique, que l'on peut placer a tout endroit dans une architecture de systeme reparti et qui est adressable comme memoire de bus locale. On definit trois classes de memoire: une classe globale partagee (214), une classe globale eloignee (180), et une classe commune repartie (314). Une unite de traduction (119) sert a convertir les adresses de la memoire de bus locale en adresses secondaires de memoire de bus d'interconnexion pour distribuer les donnees dans un systeme reparti. Ladite unite peut comprendre des memoires vives de decoupage (419) situees a chaque unite fonctionnelle et qui repondent a une adresse d'entree par la lecture d'une adresse de traduction enregistree. Chaque unite fonctionnelle peut comprendre un decoupage de memoire ayant la meme adresse de systeme que les decoupages de memoire situes dans d'autres unites fonctionnelles, de sorte que des cycles de lecture de donnees partagees peuvent s'effectuer a des vitesses de bus locales. L'affectation a une memoire est synchronisee par la diffusion de messages, l'un apres l'autre, par le biais d'un bus commun et par un programme de memoire vive de decoupage fonctionnant en commande repartie.

Fulltext Availability: Claims

## Claim

... local memory a local physical memory partition having a local memory address; establishing a system physical address space partition, corresponding to said local memory address partition; informing other nodes that said partition has been established by message transactions broadcast on said secondary bus; and loading said address...

(Item 2 from file: 349) 21/5,K/2 DIALOG(R) File 349: PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. 00784136 METHOD AND ARTICLE OF MANUFACTURE FOR BUSINESS LOGIC SERVICES A SYSTEM, PATTERNS IN A NETCENTRIC ENVIRONMENT SYSTEME, PROCEDE ET ARTICLE DE FABRICATION POUR STRUCTURES DE SERVICES DE LOGIQUE DE COMMERCE DANS UN ENVIRONNEMENT S'ARTICULANT AUTOUR DE L'INTERNET Patent Applicant/Assignee: ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality) Inventor(s): BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918 US, Legal Representative: HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, 38th Floor, 2029 Century Park East, Los Angeles, CA 90067-3024, US, Patent and Priority Information (Country, Number, Date): WO 200116728 A2-A3 20010308 (WO 0116728) Patent: WO 2000US24197 20000831 (PCT/WO US0024197) Application: Priority Application: US 99387658 19990831 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW (EA) AM AZ BY KG KZ MD RU TJ TM Main International Patent Class (v7): G06F-009/44 International Patent Class (v7): G06F-009/46 Publication Language: English Filing Language: English Fulltext Availability: Detailed Description

English Abstract

Fulltext Word Count: 150863

Claims

A system, method, and article of manufacture are provided for implementing business logic service patterns for allowing reuse of a business object in a component-based architecture. An attribute dictionary pattern is used for controlling access to data of a business object via an attribute dictionary. A constant class pattern is provided for ensuring correct data at an attribute level. The patterns are utilized for reusing a business object which is classified as a business component, a business service, and/or a business facility.

## French Abstract

L'invention porte sur un systeme, un procede et un article de fabrication s'appliquant a la mise en oeuvre de structures de services de logique de commerce en vue d'etre autorise a utiliser un objet commercial dans une architecture a base de composants. Une structure de dictionnaire d'attributs est utilisee pour commander l'acces aux donnees d'un objet commercial via un dictionnaire d'attributs. Une structure de classement constant assure la correction des donnees a un niveau d'attributs. Les structures sont utilisees pour reutiliser un objet commercial classifie comme composant commercial, service commercial et/ou installation commerciale.

Legal Status (Type, Date, Text)
Publication 20010308 A2 Without international search report and to be republished upon receipt of that report.

Search Rpt 20030109 Late publication of international search report Republication 20030109 A3 With international search report.

Fulltext Availability: Detailed Description

Detailed Description ... transaction.

Possible Product Options
Tuxedo; Encina; TOP END; CICS/6000; openUTM; TransIT Open/OLTP
Transaction Partitioning 2608
Transaction Partitioning Services provide support for mapping a single logical transaction in an application into the required multiple physical transactions. For example, in a package...

```
(Item 1 from file: 348)
30/5,K/1
DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2006 European Patent Office. All rts. reserv.
02082673
Computer system, computer, storage system, and control terminal
Computersystem, Computer, Speichersystem und Leitdatenstation
Systeme informatique, ordinateur, systeme de stockage et terminal de
    commande
PATENT ASSIGNEE:
  Hitachi, Ltd., (204159), 6-6, Marunouchi 1-chome Chiyoda-ku, Tokyo, (JP),
    (Applicant designated States: all)
INVENTOR:
  Hashimoto, Akiyoshi,c/o Hitachi Ltd., 6-1, Marunouchi 1-chome,Chiyoda-ku,
    Tokyo 100-8220, (JP)
  Iwasaki, Masaaki,c/o Hitachi Ltd., 6-1, Marunouchi 1-chome,Chiyoda-ku,
    Tokyo 100-8220, (JP)
LEGAL REPRESENTATIVE:
  Gill, Stephen Charles et al (143851), Mewburn Ellis LLP York House 23
    Kingsway, London WC2B 6HP, (GB)
PATENT (CC, No, Kind, Date): EP 1686473 A1 060802 (Basic) APPLICATION (CC, No, Date): EP 2005256116 050929;
PRIORITY (CC, No, Date): JP 200520908 050128
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;
  HU; IE; IS; IT; LI; LT; LU; LV; MC; NL; PL; PT; RO; SE; SI; SK; TR
EXTENDED DESIGNATED STATES: AL; BA; HR; MK; YU
INTERNATIONAL CLASSIFICATION (V8 + ATTRIBUTES):
IPC + Level Value Position Status Version Action Source Office:
  G06F-0009/46
                   A I F B 20060101 20060329 H EP
NOTE:
  Figure number on first page: 1
LEGAL STATUS (Type, Pub Date, Kind, Text):
                  060802 A1 Published application with search report
 Application:
                  060802 Al Date of request for examination: 20051018
 Examination:
LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                      Word Count
      CLAIMS A
               (English)
                           200631
                                       1253
      SPEC A
                (English)
                           200631
                                      16813
Total word count - document A
                                      18066
Total word count - document B
Total word count - documents A + B
                                      18066
...SPECIFICATION routing of the paths can be seen easily.
    The monitor screen 320 of the control terminal 300 thus visually
  displays the routing of paths to show that the paths connecting the
           machines and the virtual storage systems are physically
  virtual
  separated into different paths and thus form a redundant configuration.
  The administrator can see the correspondence between the physical
  connections and virtual connections between the virtual
  the virtual storage systems.
    In other words, between the virtual
                                            machine (0) and the virtual
  storage system (0), two paths are routed via different virtual I...
...forming a redundant configuration both virtually and physically.
```

...resources (virtual paths) according to a virtual path control table. In other words, in logically **partitioning** server and storage systems in cooperation, the relations among the **physical** resources and logical **resources** can be confirmed. This makes it possible to easily set a

sets the configuration of the computer system while confirming correct

first embodiment of this invention, a virtual

relations among physical...

As described so far, in creating a virtual machine according to the

machine control program

high-availability configuration of a computer system using **virtual** machines .

(Second Embodiment)

According to a second embodiment of this invention, path control programs run on...

### (Item 2 from file: 349) 30/5,K/2 DIALOG(R) File 349: PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. \*\*Image available\*\* SCALABLE PARTITION MEMORY MAPPING SYSTEM SYSTEME DE MAPPAGE DE MEMOIRE DE PARTITION ECHELONNABLE Patent Applicant/Assignee: UNISYS CORPORATION, Unisys Way, MS/E8-114, Blue Bell, PA 19424-0001, US, US (Residence), US (Nationality), (For all designated states except: US) Patent Applicant/Inventor: LANDIS John A, 7124 Old Easton Road, Pipersville, PA 18947, US, US (Residence), US (Nationality), (Designated only for: US) Legal Representative: STARR Mark T (et al) (agent), Unisys Corporation, Unisys Way, MS/E8-114, Blue Bell, PA 19424-0001, US, Patent and Priority Information (Country, Number, Date): Patent: WO 200536806 A2-A3 20050421 (WO 0536806) WO 2004US33527 20041007 (PCT/WO US04033527) Application: Priority Application: US 2003509581 20031008 Designated States: (All protection types applied unless otherwise stated - for applications 2004+) AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO SE SI SK TR (OA) BF BJ CF CG CI CM GA GN GO GW ML MR NE SN TD TG (AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW (EA) AM AZ BY KG KZ MD RU TJ TM Main International Patent Class (v7): G06F-017/30 Publication Language: English Filing Language: English Fulltext Availability: Detailed Description Claims

#### English Abstract

Fulltext Word Count: 17598

A scalable partition memory mapping system is implemented in the ultravisor partition so that the virtualized system is scalable to a virtually unlimited number of pages. A virtualization infrastructure that allows multiple guest partitions to run within a host hardware partition. Partitioned host system (10) has lesser privileged memory that is divided into distinct logical or virtual partitions including special infrastructure partitions such as boot partition (12), idle parttion (13), ultravisor partition (14), first and second I/O partitons (16 and 18), command partition (20), and operation (22), as well as virtual guest partitions (24, 26 and 28). The resource manager application of the ultravisor partition (14) manages a resource database (33) that keeps track of assignment of the resources to partitions.

### French Abstract

L'invention concerne une infrastructure de virtualisation permettant a plusieurs partitions d'invites de fonctionner au sein d'une partition de materiel hote. Ce systeme hote est divise en partitions logiques ou virtuelles distinctes et des partitions d'infrastructures speciales sont implementees pour commander la gestion de ressources et des pilotes de dispositifs d'entree/sortie physiques qui, a leur tour, sont utilises par des systemes d'exploitation dans d'autres partitions d'invites logiques ou virtuelles distinctes. La gestion de ressources de materiel hote fonctionne comme une application de poursuite dans une partition d'

ultraviseur de gestion de ressources, tandis que des decisions de gestion de ressources hotes sont realisees dans une partition de commande de niveau superieur en fonction des polices maintenues dans une partition d'operations separee. Cet hyperviseur traditionnel est reduit a un element (dispositif de surveillance) de confinement et de commutation de contextes destine aux partitions respectives, tandis que la fonctionnalite de la gestion de ressources du systeme est implementee dans la partition de l'ultraviseur. La partition dudit ultraviseur permet de maintenir la base de donnees maitresse en memoire des attributions de ressources de materiel et de permettre a un canal de commande d'accepter des demandes de transactions en vue de l'attribution des ressources aux partitions. Ladite invention a egalement pour objet des vues individuelles en memoire morte de partitions individuelles remises aux dispositifs de surveillance associes. La gestion d'entree/de sortie de materiel hote est implementee dans des partitions d'entree/sortie redondantes speciales. Un systeme de mappage de memoire de partition echelonnable est implemente dans la partition d'ultraviseur de telle maniere que le systeme virtualise est echelonnable sur un nombre virtuellement illimite de pages. Une attribution de ressources reposant sur log (2"sup"10) permet aux dimensions de la memoire de partition virtuelle de croitre au cours des nombreuses generations sans entrainer une augmentation du temps systeme de la gestion des attributions de memoire. Chaque page de memoire est attribuee a un descripteur de partitions dans la hierarchie des pages et elle est geree par la partition d'ultraviseur.

Legal Status (Type, Date, Text)

Publication 20050421 A2 Without international search report and to be republished upon receipt of that report.

Examination 20050915 Request for preliminary examination prior to expiration of applicable time limit under Rule 54bis.1(a)

Search Rpt 20051117 Late publication of international search report Republication 20051117 A3 With international search report.

Fulltext Availability: Detailed Description

Detailed Description

... of the guest operating systems hosted on that VMM. It is desired to provide a **virtualization** system in which guest operating systems may coexist on the same node without mandating a...

...by providing viltualization infrastructure that allows multiple guest partitions to run within a host hardware partition. The host system is divided into distinct logical or virtual partitions and special infrastructure partitions are implemented to control resource management and to control physical 1/0 device drivers that are, in turn, used by operating systems in other distinct logical or virtual guest partitions. Host hardware resource management runs as a tracking application in a resource management "ultravisor" partition while host resource management decisions are performed in a higher level "commane' partition based on policies maintained in an "operations" partition. This distributed resource management approach provides for recovery of each aspect

"broken" instructions.

[0011] In a preferred embodiment, a scalable **partition** memory mapping system is implemented in the ultravisor **partition** so that the virtualized system is scalable to a virtually unlimited number of pages. A log (210) based allocation allows the virtual **partition** memory sizes to grow over multiple generations without increasing the overhead of managing the memory allocations. Each page of memory is assigned to one **partition** descriptor in the page hierarchy and is managed by the

ultravisor partition .

[0012] In the preferred embodiment, the 1/0 server partitions map physical host hardware to 1/0 channel server endpoints, where the 1/0 channel servers...
...event of a node failure.

[0014] Those skilled in the art will appreciate that the **virtualization** design of the invention minimizes the impact of hardware or software failure anywhere in the...

```
(Item 3 from file: 349)
30/5.K/3
DIALOG(R) File 349: PCT FULLTEXT
(c) 2006 WIPO/Univentio. All rts. reserv.
            **Image available**
01229233
VIRTUAL DATA CENTER THAT ALLOCATES AND MANAGES SYSTEM RESOURCES ACROSS
    MULTIPLE NODES
CENTRE VIRTUEL DE DONNEES PERMETTANT D'ALLOUER ET DE GERER DES RESSOURCES
    SYSTEME PAR DES NOEUDS MULTIPLES
Patent Applicant/Assignee:
  UNISYS CORPORATION, Unisys Way, MS/E8-114, Blue Bell, PA 19424-0001, US,
    US (Residence), US (Nationality), (For all designated states except:
    US)
Patent Applicant/Inventor:
  LANDIS John A, 7124 Old Easton Road, Pipersville, PA 18947, US, US
    (Residence), US (Nationality), (Designated only for: US)
  POWDERLY Terrence V, 10 Crown Lane, East FallowField, PA 19320, US, US
    (Residence), US (Nationality), (Designated only for: US)
  SUBRAHMANIAN Rajagopalan, 731 Parkview Drive, Phoenixville, PA 19460, US,
    US (Residence), IN (Nationality), (Designated only for: US)
  PUTHIYAPARAMBIL Aravindh, 715 Parkview Drive, Phoenixville, PA 19460, US,
    US (Residence), IN (Nationality), (Designated only for: US)
Legal Representative:
  STARR Mark T et al (agent), Unisys Corporation, Unisys Way, MS/E8-114,
    Blue Bell, PA 19424-0001, US
Patent and Priority Information (Country, Number, Date):
                         WO 200536367 A2-A3 20050421 (WO 0536367)
  Patent:
                         WO 2004US33450 20041007 (PCT/WO US2004033450)
  Application:
  Priority Application: US 2003509581 20031008
Designated States:
(All protection types applied unless otherwise stated - for applications
2004+)
  AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM
  DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
  LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO
  RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
  (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO
  SE SI SK TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class (v7): G06F
International Patent Class (v8 + Attributes)
IPC + Level Value Position Status Version Action Source Office:
  G06F-0015/16
                   A I F B 20060101
                                              H US
                                              H US
  G06F-0015/167
                   A I L B 20060101
                  A I L B 20060101
                                              H US
  G06F-0015/173
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 12092
English Abstract
  The present invention provides a virtualization infrastructure that
  allows multiple guest/user partitions (24, 26, 28) to run within a host hardware partition (10). The host system (10) is divided into distinct
  logical or virtual partitions and special infrastructure partitions
  (12-22) implemented to control resource management and to control
  physical I/O device drivers (16, 18) that are, in turn, used by operating
  systems in other distinct logical or virtual guest/user partitions (24,
```

26, 28). Host hardware resource management runs as a tracking application in a resource management "ultravisor" partition (14), while host resource

management decisions are performed in a higher-level command partition (20) based on policies maintained in a separate operations partition (22). The ultravisor partition (14) maintains a master database (33) of the hardware resource allocations, and virtual partition monitors (34, 36) are provided in each partition to constrain the guest/user operating system to the assigned resources.

#### French Abstract

Cette invention concerne une structure de virtualisation permettant a des partitions invitees multiples de fonctionner a l'interieur d'une partition materielle hote. Le systeme hote est subdivise en partitions logiques ou virtuelles distinctes, des partitions d'infrastructures speciales etant mises en oeuvre pour commander la gestion des ressources et commander des actuateurs physiques entree/sortie, lesquels sont eux-memes utilises par les systeme d'exploitation dans d'autres partitions invitees logiques ou virtuelles. La gestion des ressources materielles hotes fonctionne en tant qu'application de recherche dans une partition <= ultraviseur>= de gestion de ressources, alors que les decisions sont executees dans une partition d'instructions de niveau superieur en fonction des politiques contenues dans une partition d'exploitation distincte. L'hyperviserur classique est reduit a un element de commutation de contexte et de contention (moniteur) pour les partitions respectives, alors que la fonction de gestion des ressources systeme sont mises en oeuvre dans la partition de l'ultraviseur. La partition de l'ultraviseur accueille la base de donnees principale en memoire des attributions de ressources materielles et fait office de canal d'instruction acceptant les demandes de transaction pour l'attribution des ressources aux partitions. Elle fournit egalement des representations a lecture seule des diverses partitions pour les moniteurs de partition associes. La gestion entree/sortie du materiel hote se deroule dans des partitions PO redondantes speciales. Les systemes d'exploitation d'autres partitions logiques ou virtuelles communiquent avec les partitions entree/sortie via des canaux de memoire etablis par la partition de l'ultraviseur. Les systemes d'exploitation invites des partitions logiques ou virtuelles correspondants sont modifies pour qu'ils puissent acceder aux moniteurs qui mettent en oeuvre l'interface d'appel du systeme par laquelle l'ultraviseur, l'entree/sortie et toutes autres partitions d'infrastructure speciales peuvent lancer des communications entre elles et avec les partitions invitees respectives. Les systemes d'exploitation invites sont modifies pour qu'ils ne puissent pas tenter d'utiliser les instructions "cassees" du systeme x86 que des systemes de virtualisation complets doivent resoudre par insertion de pieges. Les ressources systeme sont separees en zones administrees par une partition distincte contenant des politiques de gestion distinctes pouvant etre appliquees via des noeuds pour la mise en oeuvre d'un centre de donnees virtuel.

Legal Status (Type, Date, Text)
Publication 20050421 A2 Without international search report and to be republished upon receipt of that report.

Examination 20050929 Request for preliminary examination prior to expiration of applicable time limit under Rule 54bis.1(a)

Search Rpt 20060622 Late publication of international search report Republication 20060622 A3 With international search report.

Republication 20060622 A3 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Fulltext Availability: Detailed Description

Detailed Description ... INVENTION

[00081 The present invention addresses the above-mentioned limitations in

the art by providing virtualization infrastructure that allows multiple guest partitions to run within a host hardware partition. The host system is divided into distinct logical or virtual partitions and special infrastructure partitions are implemented to control resource management and to control pllysical. 1/0 device drivers that are, in turn, used by operating systems in other distinct logical or virtual guest partitions. Host hardware resource management runs as a tracking application in a resource management "ultravisor" partition while host resource management decisions are performed in a higher level "command" partition based on policies maintained in an "operations" partition. This distributed resource management approach provides for recovery of each aspect - 3 "broken" instructions.

[00111 Inapreferredembodiment, ascalable partition memory mapping system is implemented in the ultravisor **partition** so that the virtualized system is scalable to a virtually unlimited number of pages. A log (210) based allocation allows the virtual **partition** memory sizes to grow over multiple generations without increasing the overhead of managing the memory allocations. Each page of memory is assigned to one **partition** descriptor in the page hierarchy and is managed by the ultravisor **partition**.

[00121 In the preferred embodiment, the 1/0 server partitions map physical host hardware to 1/0 channel server endpoints, where the 1/0 channel servers are...

...assigned I/O server partition. The - 4
BRIEF DESCRIPTION OF THE DRAWINGS
[00151 A para- virtualization system in accordance with the invention is further described below with reference to the accompanying...

```
(Item 4 from file: 349)
30/5,K/4
DIALOG(R) File 349: PCT FULLTEXT
(c) 2006 WIPO/Univentio. All rts. reserv.
            **Image available**
01229143
COMPUTER SYSTEM PARA-VIRTUALIZATION USING A HYPERVISOR THAT IS IMPLEMENTED
    IN A PARTITION OF THE HOST SYSTEM
PARA-VIRTUALISATION D'UN SYSTEME INFORMATIQUE UTILISANT UN HYPERVISEUR
    IMPLEMENTE DANS UNE PARTITION DU SYSTEME HOTE
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    Blue Bell, PA 19424-0001, US,
Patent and Priority Information (Country, Number, Date):
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  Application:
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Publication Language: English
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Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 16734
English Abstract
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A virtualization infrastructure that allows multiple guest partitions (24, 26, 28) to run within a host hardware partition (10). The host system is divided into distinct logical or virtual partitions (24, 26, 28) and special infrastructure partitions (12-14, 16, 18, 20, 22) are implemented to control resource management and to control physical I/O device drivers that are, in turn, used by operating systems in other distinct logical or virtual guest partitions (24, 26, 28). Host hardware resource management runs as a tracking application in a resource management "ultravisor" partition (14), while host resource management decisions are performed in a higher level command partition (20) based on policies maintained in a separate operations partition (22). The conventional hypervisor (32) is reduced to a context switching and containment element (monitor) for the respective partitions (24, 26, 28),

while the system resource management functionality is implemented in the ultravisor partition (14). The ultravisor partition (14) maintains the master in-memory database (33) of the hardware resource allocations and serves a command channel to accept transactional requests for assignment of resources to partitions (24, 26, 28). It also provides individual read-only views of individual partitions (24, 26, 28) to the associated partition monitors. Host hardware I/O management is implemented in special redundant I/O partitions (16, 18). Operating systems in other logical or virtual partitions (24, 26, 28) communicate with the I/O partitions (16, 18) via memory channels established by the ultravisor partition (14). The guest operating systems in the respective logical or virtual partitions (24, 26, 28) are modified to access monitors that implement a system call interface through which the ultravisor (14), I/O (16, 18), and any other special infrastructure partitions (12-13, 20, 22) may initiate communications with each other and with the respective guest partitions (24, 26, 28). The guest operating systems are modified so that they do not attempt to use the "broken" instructions in the x86 system that complete virtualization systems must resolve by inserting traps.

#### French Abstract

L'invention concerne une infrastructure de virtualisation qui permet a de multiples partitions hotes (24, 26, 28) de s'executer dans une partition d'un materiel hote (10). Le systeme hote est divise en partitions logiques ou virtuelles distinctes (24, 26, 28), et des partitions d'infrastructure speciales (12-14, 16, 18, 20, 22) sont implementees de facon a controler la gestion des ressources et les pilotes physiques d'un dispositif d'E-S, lesquels pilotes physiques sont, a leur tour, utilises par des systemes d'exploitation dans d'autres partitions hotes logiques ou virtuelles distinctes (24, 26, 28). La gestion des ressources du materiel hote tourne comme une application de poursuite dans une partition de "l'ultraviseur" (14) de gestion des ressources, tandis que des decisions de gestion des ressources de l'hote sont accomplies dans une partition de commande de niveau superieur (20), sur la base de politiques maintenues dans une partition d'operations (22) separee. L'hyperviseur classique (32) est reduit a une commutation de contexte et a un element (controleur) de confinement pour les partitions respectives (24, 26, 28), tandis que la fonctionnalite de gestion des ressources du systeme est mise en oeuvre dans la partition de l'ultraviseur (14). La partition de l'ultraviseur (14) maintient le master (33) dans une base de donnees en memoire des allocations de ressources du materiel, et produit une voie de commande pour accepter des demandes de transaction destinees a l'affectation de ressources a des partitions (24, 26, 28). Elle fournit egalement, en lecture seule, des vues de partitions individuelles (24, 26, 28) aux controleurs de partitions associes. La gestion des E-S du materiel hote est mise en oeuvre dans des partitions d'E-S speciales redondantes (16, 18). Les systemes d'exploitation presents dans d'autres partitions logiques ou virtuelles (24, 26, 28) communiquent avec les partitions d'E-S (16, 18) par des voies de la memoire etablies par la partition de l'ultraviseur (14). Les systemes d'exploitation presents dans les partitions logiques ou virtuelles (24, 26, 28) respectives sont modifiees de facon a acceder aux moniteurs qui mettent en œuvre une interface d'appel du systeme par laquelle l'ultraviseur (14) , l'E-S (16, 18) et toutes autres partitions d'infrastructure speciales (12-13, 20, 22) peuvent entrer en communication les unes avec les autres et avec les partitions hotes respectives (24, 26, 28). Les systemes d'exploitation sont modifies de sorte que qu'ils n'essaient pas d'utiliser les instructions "cassees" dans le systeme x86 que les systemes de virtualisation completes doivent resoudre par insertion d'interruptions.

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Publication 20050421 A1 With international search report.
Publication 20050421 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

### Fulltext Availability: Detailed Description

## Detailed Description

- ... systems and processes to share the hardware resources of a host computer. Ideally, the system **virtualization** provides resource isolation so that each operating system does not realize that it is sharing...
- ...by providing virtualization infrastructure that allows multiple guest partitions to run within a host hardware partition. The host system is divided into distinct logical or virtual partitions and special infrastructure partitions are implemented to control resource management and to control physical I/O device drivers that are, in turn, used by operating systems in other distinct logical or virtual guest partitions. Host hardware resource management runs as a tracking application in a resource management "ultravisor" partition while host resource management decisions are perfonned in a higher level "command" partition based on policies maintained in an "operations" partition. This distributed resource management approach provides for recovery of each aspect 3 "broken" instructions.
  - [00111 Inapreferredembodimentascalablepartitionmemorymappingsystemis implemented in the ultravisor **partition** so that the virtualized system is scalable to a virtually unlimited number of pages. A log (210) based allocation allows the virtual **partition** memory sizes to grow over multiple generations without increasing the overhead of managing the merriLory allocations. Each page of memory is assigned to one **partition** descriptor in the page hierarchy and is managed by the ultravisor **partition**.
  - [0012] In the preferred embodiment, the 1/0 server partitions map physical host hardware to 1/0 channel server endpoints, where the PO channel servers are responsible...
- ...event of a node failure.
  - [0014] Those skilled in the art will appreciate that the **virtualization** design of the invention minimizes the impact of hardware or software failure anywhere in the...

(Item 7 from file: 349) DIALOG(R) File 349: PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. 00784139 A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A SELF-DESCRIBING STREAM IN A COMMUNICATION SERVICES PATTERNS ENVIRONMENT FABRICATION DESTINES A UN FLUX PROCEDE ET ARTICLE DΕ D'AUTODESCRIPTEURS DANS UN ENVIRONNEMENT DE MODELES DE SERVICES DE COMMUNICATION Patent Applicant/Assignee: ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality) Inventor(s): BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918 Legal Representative: HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, 1400 Page Mill Road, Palo Alto, CA 94304, US, Patent and Priority Information (Country, Number, Date): WO 200116734 A2-A3 20010308 (WO 0116734) Patent: WO 2000US23999 20000831 (PCT/WO US0023999) Application: Priority Application: US 99387070 19990831 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW (EA) AM AZ BY KG KZ MD RU TJ TM Main International Patent Class (v7): G06F-009/46 Publication Language: English Filing Language: English Fulltext Availability:

Detailed Description Claims

Fulltext Word Count: 150517

## English Abstract

A system, method, and article of manufacture are described for providing a self-describing stream-based communication system. Messages are sent which include data between a sending system and a receiving system. Meta-data is attached to the messages being sent between the sending system and the receiving system. The data of the messages sent from the sending system to the receiving system is translated based on the meta-data. The meta-data includes first and second sections. The first section identifies a type of object associated with the data and a number of attribute descriptors in the data. The second section includes a series of the attribute descriptors defining elements of the data.

#### French Abstract

L'invention concerne un systeme, un procede et un article de fabrication destines a constituer un systeme de communication a base d'un flux d'autodescripteurs. Des messages comprenant des donnees sont envoyes, entre un systeme expediteur et un systeme recepteur. Des metadonnees sont attachees aux messages en cours d'envoi entre le systeme expediteur et le systeme recepteur. Les donnees des messages envoyes du systeme expediteur au systeme recepteur sont traduites d'apres les metadonnees, lesquelles comprennent des premiere et seconde sections. La premiere section identifie un type d'objet associe aux donnees et un nombre de

descripteurs d'attributs presents dans celles-ci. La seconde section comprend une serie de descripteurs d'attributs definissant des elements des donnees.

Legal Status (Type, Date, Text)

Publication 20010308 A2 Without international search report and to be republished upon receipt of that report.

Examination 20010927 Request for preliminary examination prior to end of 19th month from priority date

Search Rpt 20020221 Late publication of international search report Republication 20020221 A3 With international search report.

Fulltext Availability: Detailed Description

Detailed Description

... guaranteed by ensuring that an update is completed correctly and entirely or not at all. **Resource** Management Services use locking, commit, and rollback services, and are integrated with Transaction Management Services...

...Options
Tuxedo; Encina; TOP END; CICS/6000; openUTM; TransIT Open/0LTP
Transaction Partitioning 2608
Transaction Partitioning Services provide support for mapping a single logical transaction in an application into the required multiple physical transactions. For example, in a package or legacy rich environment, the single logical transaction of changing a customer address may require the partitioning and coordination of several physical transactions to multiple application systems or databases.
Transaction Partitioning Services provide the application with a simple single transaction view.

In a given application...

...then an update to a table in a MVS DB2 database. Although there are two physical transactions occurring, this entire business process is represented as a single logical transaction. Transaction Partitioning services allow the application to ensure that the individual transactions occurr across the different UNIX and MVS systems and that the single logical transaction is completed and successful when the individual physical transactions are completed and successful. ENVIRONMENT 1016,1018
Figure 27 illustrates various components of the...

...ability to login, logoff, authenticate to the operating system, and enforce access control to system **resources** and executables.

Profile Management 2712
Profile Management Services are used to access and update local...

(Item 8 from file: 349) DIALOG(R) File 349: PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. 00784138 SYSTEM, METHOD, AND ARTICLE OF MANUFACTURE FOR A REQUEST BATCHER IN A TRANSACTION SERVICES PATTERNS ENVIRONMENT SYSTEME, PROCEDE ET ARTICLE MANUFACTURE POUR MODULE DE MISE EN LOTS DES CARACTERISE PAR DES SERVICES ENVIRONNEMENT DANS UN REOUETES TRANSACTIONNELS Patent Applicant/Assignee: ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality) Inventor(s): BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918 Legal Representative: HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, 1400 Page Mills Road, Palo Alto, CA 94304, US, Patent and Priority Information (Country, Number, Date): WO 200116733 A2-A3 20010308 (WO 0116733) Patent: WO 2000US23885 20000831 (PCT/WO US0023885) Application: Priority Application: US 99387575 19990831 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CU CZ DE DK DZ EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW (EA) AM AZ BY KG KZ MD RU TJ TM Main International Patent Class (v7): G06F-009/46 Publication Language: English Filing Language: English Fulltext Availability: Detailed Description

English Abstract

Fulltext Word Count: 150393

Claims

A system, method and article of manufacture are provided for batching logical requests for reducing network traffic. A group of business objects necessary for a transaction are provided and managed in a logical unit of work. Logically-related requests received from the logical unit of work are grouped into a single network message which is then stored. The message is sent upon receiving an order to send the message.

#### French Abstract

La presente invention concerne un systeme, un procede et un article manufacture destine a la mise en lots des requetes de facon a reduire le trafic reseau. A cet effet, on constitue un groupe d'objets d'affaire necessaires a une transaction et on le gere dans une unite logique de travail. Les requetes entre lesquelles existent des liaisons logiques sont regroupees en un unique message de reseau qui est alors mis en memoire. L'envoi du message intervient des la reception d'un ordre d'envoi du message.

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Search Rpt 20020221 Late publication of international search report
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Fulltext Availability: Detailed Description

Detailed Description

... guaranteed by ensuring that an update is completed correctly and entirely or not at all. **Resource** Management Services use locking, commit, and rollback services, and are integrated with Transaction Management Services...

...Tuxedo; Encina; TOP END; CICS/6000; openUTM; TransIT Open/OLTP Transaction Partitioning 2608 200

Transaction Partitioning Services provide support for mapping a single logical transaction in an application into the required multiple physical transactions. For example, in a package or legacy rich environment, the single logical transaction of changing a customer address may require the partitioning and coordination of several physical transactions to multiple application systems or databases. Transaction Partitioning Services provide the application with a simple single transaction view.

Implementation considerations
Must the system support **logical** transactions that occur across heterogenous application servers and databases?

EXAMPLE.

In a given application, a...

...then an update to a table in a MVS DB2 database. Although there are two physical transactions occurring, this entire business process is represented as a single logical transaction. Transaction Partitioning services allow the application to ensure that the individual transactions occurr across the different UNIX and MVS systems and that the single logical transaction is completed and successful when the individual physical transactions are completed and successful.

ENVIRONMENT 1016,1018
Figure 27 illustrates various components of the...

...ability to login, logoff, authenticate to the operating system, and enforce access control to system **resources** and executables.

Profile Management 2712
Profile Management Services are used to access and update local...

30/5,K/9 (Item 9 from file: 349) DIALOG(R) File 349: PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. 00784137 METHOD, AND ARTICLE OF MANUFACTURE FOR DISTRIBUTED GARBAGE SYSTEM, COLLECTION IN ENVIRONMENT SERVICES PATTERNS SYSTEME, PROCEDE ET ARTICLE DE FABRICATION EN MATIERE DE RECUPERATION D'ESPACE REPARTI DANS DES MOTIFS DE SERVICES D'ENVIRONNEMENT Patent Applicant/Assignee: ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality) Inventor(s): BOWMAN-AMUAH Michel K, 6416 Peak Vista Circle, Colorado Springs, CO 80918 , US, Legal Representative: HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, 1400 Page Mill Road, Palo Alto, CA 94304, US, Patent and Priority Information (Country, Number, Date): WO 200116729 A2-A3 20010308 (WO 0116729) Patent: WO 2000US24238 20000831 (PCT/WO US0024238) Application: Priority Application: US 99386435 19990831 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW (EA) AM AZ BY KG KZ MD RU TJ TM Main International Patent Class (v7): G06F-009/44 International Patent Class (v7): G06F-009/46 Publication Language: English

Filing Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 150959

## English Abstract

A system, method and article of manufacture are provided for detecting an orphaned server context. A collection of outstanding server objects is maintained and a list of contexts is created for each of the outstanding server objects. A compilation of clients who are interested in each of the outstanding server objects are added to the list. Recorded on the list is a duration of time since the clients invoked a method accessing each of the contexts of the outstanding server objects. The list is examined at predetermined intervals for determining whether a predetermined amount of time has passed since each of the objects has been accessed. Contexts that have not been accessed in the predetermined amount of time are selected and information is sent to the clients identifying the contexts that have not been accessed in the predetermined amount of time.

### French Abstract

L'invention concerne un systeme, un procede et un article de fabrication permettant de detecter un contexte de serveur a l'abandon. On conserve une collection d'objets de serveur en cours et on cree une liste de contextes pour chaque objet dudit serveur, a laquelle on ajoute une compilation de clients s'interessant a chaque objet de serveur en cours. On enregistre sur la liste une duree a partir du moment ou les clients lancent un procede leur permettant d'acceder a chaque contexte des objets de serveur en cours. La liste est examinee a des intervalles predetermines pour etablir si, depuis l'acces auxdits objets, un delai predetermine s'est ecoule ou non. Les contextes auxquels on n'a pas accede dans le delai predetermine sont selectionnes et les clients informes de l'identite de ces contextes.

Legal Status (Type, Date, Text)

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Republication 20021227 A3 With international search report.

Search Rpt 20021227 Late publication of international search report 20030904 Corrected version of Pamphlet: pages 1/120-120/120,

drawings, replaced by new pages 1/119-119/119

Republication 20030904 A3 With international search report.

Fulltext Availability: Detailed Description

Detailed Description

... guaranteed by ensuring that an update is completed correctly and entirely or not at all. **Resource** Management Services use locking, commit, and rollback services, and are integrated with Transaction Management Services...

...Options

Tuxedo; Encina; TOP END; CICS/6000; openUTM; TransIT Open/OLTP
Transaction Partitioning 2608
Transaction Partitioning Services provide support for mapping a
single logical transaction in an application into the required multiple
physical transactions. For example, in a package or legacy rich
environment, the single logical transaction of changing a customer
address may require the partitioning and coordination of several
physical transactions to multiple application systems or databases.
Transaction Partitioning Services provide the application with a simple
single transaction view.

Implementation considerations
Must the system support **logical** transactions that occur across heterogenous application servers and databases?
202
EXAMPLE.

In a given application...

...then an update to a table in a MVS DB2 database. Although there are two physical transactions occurring, this entire business process is represented as a single logical transaction. Transaction Partitioning services allow the application to ensure that the individual transactions occurr across the different UNIX and MVS systems and that the single logical transaction is completed and successful when the individual physical transactions are completed and successful.

ENVIRONMENT 1016,1018

Figure 27 illustrates various components of the...ability to login, ... logoff, authenticate to the operating system, and enforce access control to system resources and executables.

Profile Management 2712

Profile Management Services are used to access and update local...

(Item 13 from file: 349) 30/5,K/13 DIALOG(R) File 349: PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. 00784124 SYSTEM, METHOD, AND ARTICLE OF MANUFACTURE FOR A REQUEST SORTER IN A TRANSACTION SERVICES PATTERNS ENVIRONMENT SYSTEME, PROCEDE ET ARTICLE DE FABRICATION APPLIQUES DANS UN TRIEUR DE REQUETES D'UN ENVIRONNEMENT DE STRUCTURES DE SERVICES DE TRANSACTIONS Patent Applicant/Assignee: ACCENTURE LLP, 1661 Page Mill Road, Palo Alto, CA 94304, US, US (Residence), US (Nationality) Inventor(s): BOWMAN-AMUAH Michel K, 6426 Peak Vista Circle, Colorado Springs, CO 80918 , US, Legal Representative: HICKMAN Paul L (agent), Oppenheimer Wolff & Donnelly, LLP, 38th floor, 2029 Century Park East, Los Angeles, CA 90067-3024, US, Patent and Priority Information (Country, Number, Date): WO 200116704 A2-A3 20010308 (WO 0116704) WO 2000US24082 20000831 (PCT/WO US0024082) Application: Priority Application: US 99386715 19990831 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW (EA) AM AZ BY KG KZ MD RU TJ TM Main International Patent Class (v7): G06F-009/46 Publication Language: English Filing Language: English Fulltext Availability:

English Abstract

Claims

Detailed Description

Fulltext Word Count: 150733

A system, method and article of manufacture are provided for sorting requests that are being unbatched from a batched message. A group of business objects necessary for a transaction are provided. Logically-related requests received from the business objects are grouped. Sorting rules and/or sort weights are obtained and the requests in the message are sorted and placed in a specific order determined from the sorting rules and/or the sort weights. The sorted requests are batched into a single message which is sent to a data server where the requests are unbundled from the message in the specific order.

## French Abstract

L'invention porte sur un systeme, un procede et un article de fabrication utilises dans le tri de requetes qui sont desolidarisees d'un message traite par lots. L'invention porte egalement sur un groupe d'objets commerciaux destines a etre utilises dans une transaction. Les requetes relatives a une logique et provenant d'objets commerciaux sont groupees. Des regles et/ou des poids de tri sont obtenus et les requetes du message sont triees et placees dans un ordre specifique, determine a partir des regles et/ou des poids de tri. Les requetes triees sont traitees par lots dans un message unique qui est envoye a un serveur de donnees ou les requetes sont desolidarisees du message dans l'ordre specifique.

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Fulltext Availability: Detailed Description

Detailed Description

... guaranteed by ensuring that an update is completed correctly and entirely or not at all. **Resource** Management Services use locking, commit, and rollback services, and are integrated with Transaction Management Services...

...Tuxedo; Encina; TOP END; CICS/6000; openUTM; TranslT Open/OLTP Transaction Partitioning 2608

Transaction Partitioning Services pr6vide support for mapping a single logical transaction in an application into the required multiple physical transactions. For example, in a package or legacy rich environment, the single logical transaction of changing a customer address may require the partitioning and coordination of several physical transactions to multiple application systems or databases. Transaction Partitioning Services provide the application with a simple single transaction view.

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EXAMPLE.

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ENVIRONMENT 1016,1018
Figure 27 illustrates various components of the...

...ability to login, logoff, authenticate to the operating system, and enforce access control to system **resources** and executables. Profile Management 2712

Profile Management Services are used to access and update local...

(Item 1 from file: 349) 36/5,K/1 DIALOG(R) File 349:PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. \*\*Image available\*\* A SYSTEM AND METHOD FOR REVENUE AND AUTHORIZATION MANAGEMENT SYSTEME ET PROCEDE POUR LA GESTION D'AUTORISATIONS ET DE RECETTES Patent Applicant/Assignee: CONVERGYS INFORMATION MANAGEMENT GROUP INC, 600 Vine Street, Cinncinnati, OH 45202, US, US (Residence), US (Nationality), (For all designated states except: US) Patent Applicant/Inventor: CLUBB Ian James, 38 Station road, Histon Cambridge 9LQ, GB, GB (Residence), GB (Nationality), (Designated only for: US) CLARIDGE Philip Geoffrey, 3 Clare Drive, Highfields Caldecote, Cambridge, CB3 7UY, GB, GB (Residence), GB (Nationality), (Designated only for: SHUSTA Thomas Joseph, 830 Riverbend Blvd., Longwood, FL 32779, US, US (Residence), US (Nationality), (Designated only for: US)
MILLER Jeffrey M, 1021 Turtle Creek Drive, Oviedo, FL 32765, US, US
(Residence), US (Nationality), (Designated only for: US) Legal Representative: SCHALNAT Ria Farrell (agent), Frost Brown Todd LLC, 201 East Fifth Street, 2200 PNC Center, Cincinnati, OH 45202, US, Patent and Priority Information (Country, Number, Date): WO 200434228 A2-A3 20040422 (WO 0434228) Patent: WO 2003US32255 20031010 (PCT/WO US03032255) Application: Priority Application: US 2002417706 20021010; US 2003682663 20031009 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW (EA) AM AZ BY KG KZ MD RU TJ TM Main International Patent Class (v7): G06F-017/60 Publication Language: English Filing Language: English Fulltext Availability: Detailed Description Fulltext Word Count: 30148

### English Abstract

A system is disclosed for facilitating relationship-centric authorization of transactions in a manner which provides optimum scalability and availability by logically partitioning wallets in conjunction with partitioning a resource associated with a group of consumers (Fig. 1).

## French Abstract

L'invention concerne un systeme facilitant l'autorisation de transactions, centree sur des relations, de facon a permettre d'obtenir une extensibilite et une disponibilite optimales en divisant de facon logique des portefeuilles et en divisant une ressource associee a un groupe de consommateurs.

Legal Status (Type, Date, Text)

Publication 20040422 A2 Without international search report and to be republished upon receipt of that report.

Search Rpt 20050120 Late publication of international search report

Republication 20050120 A3 With international search report.

Fulltext Availability: Detailed Description

Detailed Description

... allocated to different Logical Consumer Servers (926, 927) are provisioned to the same Logical Consumer Server (927) if a CRM modification causes them to share a common wallet (C). Under nonnal...

...together may be 'marked' to execute on the same logical server and use the same logical database. For example the external IDs (IMSI, phone number, e-mail addresses) for a family [01291 By repartitioning the logical to physical mapping, associated units of database.

[01301 A preferred embodiment may be designed to be distributable, but does

not mandate that it is distributed. The use of the logical partitioning

and the mapping of those partitions onto physical machines allows the consumer to decide on their preferred hardware strategy including.

single...

...class server (or small number of such machines);
multiple mid-range servers; enterprise class servers partitioned into
35
multiple servers; blade servers; and many twin or quad CPU PC class
machines. Load-balancing between nodes using the logical to
physical mapping may be extremely straightforward. Capacity
planning and increase may be simpler through the introduction of...

...that the impact of a process failure within a single machine may be reduced.

[01311 Physical Server Partitioning rMissing here some discussion of the file control and application control databases]
[01321 By partitioning work across multiple physical servers, the system (900) may use partitioned cache / shared memory to cache data to speed...

...01341 Referring to Figure 8, there is shown an embodiment in which associated with every **Server** Pool (750-752) undertaking a particular task there may be a supervisory Work Manager (965...

36/5,K/2 (Item 2 from file: 349) DIALOG(R) File 349: PCT FULLTEXT (c) 2006 WIPO/Univentio. All rts. reserv. 01112894 A SYSTEM AND METHOD FOR WORK MANAGEMENT SYSTEME ET PROCEDE POUR LA GESTION DE TACHES Patent Applicant/Assignee: CONVERGYS INFORMATION MANAGEMENT GROUP INC, 600 Vine Street, Cincinnati, OH 45202, US, US (Residence), US (Nationality), (For all designated states except: US) Patent Applicant/Inventor: CLUBB Ian James, 38 Station Road, Histon, Cambridge 9LQ, GB, GB (Residence), GB (Nationality), (Designated only for: US) CLARIDGE Philip Geoffrey, 3 Clare Drive, Highfields Caldecote, Cambridge, CB3 7UY, GB, GB (Residence), GB (Nationality), (Designated only for: US) SHUSTA Thomas Joseph, 830 Riverbend Blvd., Longwood, FL 32779, US, US (Residence), US (Nationality), (Designated only for: US) MILLER Jeffrey M, 1021 Turtle Creek Drive, Oviedo, FL 32765, US, US (Residence), US (Nationality), (Designated only for: US) Legal Representative: SCHALNAT Ria Farrell (et al) (agent), Frost Brown Todd LLC, 201 East Fifth Street, 2200 PNC Center, Cincinnati, OH 45202, US, Patent and Priority Information (Country, Number, Date): WO 200434259 A2-A3 20040422 (WO 0434259) Patent: WO 2003US32254 20031010 (PCT/WO US03032254) Application: Priority Application: US 2002417706 20021010; US 2003682601 20031009 Designated States: (Protection type is "patent" unless otherwise stated - for applications prior to 2004) AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW (EA) AM AZ BY KG KZ MD RU TJ TM Main International Patent Class (v7): G06F-009/46 Publication Language: English Filing Language: English Fulltext Availability: Detailed Description Claims

# English Abstract

Fulltext Word Count: 31194

A system is disclosed for facilitating relationship-centric authorization of transactions in a manner which provides optimum scalability and availability by logically partitioning key servers in conjunction with partitioning a resource associated with a group of consumers across the set of logical servers associated therewith.

### French Abstract

Cette invention se rapporte a un systeme qui sert a faciliter l'autorisation de transactions, avec centrage sur la relation, selon un mode qui offre une variabilite d'echelle et une disponibilite optimales, en partageant de facon logique les serveurs de cles en conjonction avec le partage d'une ressource associee a un groupe de consommateurs sur l'ensemble des serveurs logiques associes a lui.

Legal Status (Type, Date, Text)
Publication 20040422 A2 Without international search report and to be

republished upon receipt of that report.

Correction 20040819 Corrections of entry in Section 1: under (30) replace "Not furnished, 9 October 2003 (09.10.2003), US" by "10/682,601, 9 October 2003 (09.10.2003), US"

Republication 20040819 A2 Without international search report and to be republished upon receipt of that report.

Correction 20040819 Corrections of entry in Section 1:

Search Rpt 20041104 Late publication of international search report

Republication 20041104 A3 With international search report.

Republication 20041104 A3 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Fulltext Availability: Detailed Description

#### Detailed Description

... allocated to different Logical Consumer
Servers (926, 927) are provisioned to the same Logical Consumer
Server (927) if a CRM modification causes them to share a common wallet (Q. Under norinal...

...together may be 'marked' to execute on the same logical server and use the same logical database. For example the external IDs, (MISI, phone number, e-mail addresses) for a family] By repartitioning the logical to physical mapping, associated units of database.

[0132] A prefer-red embodiment may be designed to be distributable, but does

not mandate that it is distributed. The use of the logical partitioning

and the mapping of those **partitions** onto physical machines allows the consumer to decide on their preferred hardware strategy including.

single...

...class server (or small number of such machines);
multiple mid-range servers; enterprise class servers partitioned into
35
SUBSTITUTE SHEET (RULE 26)
multiple servers; blade servers; and many twin or quad CPU PC Class
machines. Load-balancing between nodes using the logical to
physical mapping may be extremely straightforward. Capacity
planning and increase may also be simpler through the introduction...

...that the impact of a process failure within a single machine may be reduced.
[01331 Physical Server Partitioning rMissing here some discussion of the file control and gpplication control databases]
[01341 By partitioning work across multiple physical servers, the system (900) may use partitioned cache / shared memory to cache data to speed...

...01361 Referring to Figure 8, -there is shown an embodiment in which associated with every **Server** Pool (750-752) undertaking a particular task there may be a supervisory Work Manager (965...

```
Description
        Items
       220561
                PARTITION?
S1
                LOGICAL
S2
       609927
S3
      2577582
                PHYSICAL
                SERVER? ?
S4
      2790678
                CLIENT? ? OR NODE? ? OR TERMINAL? ? OR WORKSTATION? ?
S5
      8372199
                RESOURCE? ? OR FILE OR RECORD OR CONTENT? ?
S6
     22071354
S7
          768
                S4 () S1
          157
                S5 () S1
S8
                (PROVIDE? ? OR PROVIDING OR PROVISION OR GRANT? ? OR GRANT-
59
        17661
             ING) (5N) S2
                S2 (5N) (ACCESS OR AUTHORI? OR ALLOW? OR PERMISSION? ? OR -
S10
        15873
             PERMIT OR PERMITTED OR PERMITTING )
                (S2 OR S3) (5N) (MAP OR MAPS OR MAPPING)
        10557
S11
                (S2 OR S3) (5N) (CORRESPOND? OR RELATIONSHIP? ? OR CORRELA-
S12
             TION? ? OR CORRELATE? ? OR CORRELATING OR ASSOCIATION? ? OR A-
             SSOCIATE? ? OR ASSOCIATING OR MATCH OR MATCHING )
         5510
                S4 (3N) S1
S13
         2295
                S5 (3N) S1
S14
                HYPERVISOR? ? OR VIRTUAL() MACHINE? ? OR VM OR VIRTUALIZATI-
       109239
S15
             ON
            0
S16
                S8 (7N) (S11 OR S12)
                S14 (7N) (S11 OR S12)
S17
                S1 (30N) S2 (30N) S3 (30N) S4 (30N) S5 (30N) (S11 OR S12)
S18
           32
           15
                S18 (30N) S6
S19
                S19 NOT PY>2004
S20
           15
S21
           10
                RD
                    (unique items)
File 88:Gale Group Business A.R.T.S. 1976-2006/Jul 31
         (c) 2006 The Gale Group
File 369: New Scientist 1994-2006/Jul W2
         (c) 2006 Reed Business Information Ltd.
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 635:Business Dateline(R) 1985-2006/Aug 10
         (c) 2006 ProQuest Info&Learning
      15:ABI/Inform(R) 1971-2006/Aug 10
File
         (c) 2006 ProQuest Info&Learning
File
      16:Gale Group PROMT(R) 1990-2006/Aug 09
         (c) 2006 The Gale Group
File
       9:Business & Industry(R) Jul/1994-2006/Aug 09
         (c) 2006
                   The Gale Group
      13:BAMP 2006/Jul W5
File
         (c) 2006 The Gale Group
File 810: Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
File 610: Business Wire 1999-2006/Aug 10
         (c) 2006 Business Wire.
File 647:CMP Computer Fulltext 1988-2006/Sep W3
         (c) 2006 CMP Media, LLC
      98:General Sci Abs 1984-2005/Jan
         (c) 2006 The HW Wilson Co.
File 148:Gale Group Trade & Industry DB 1976-2006/Aug 09
         (c) 2006 The Gale Group
File 634:San Jose Mercury Jun 1985-2006/Aug 09
         (c) 2006 San Jose Mercury News
File 275:Gale Group Computer DB(TM) 1983-2006/Aug 09
         (c) 2006 The Gale Group
      47: Gale Group Magazine DB(TM) 1959-2006/Aug 09
File
         (c) 2006 The Gale group
File 75:TGG Management Contents(R) 86-2006/Jul W5
         (c) 2006 The Gale Group
File 636:Gale Group Newsletter DB(TM) 1987-2006/Aug 09
         (c) 2006 The Gale Group
File 624:McGraw-Hill Publications 1985-2006/Aug 10
         (c) 2006 McGraw-Hill Co. Inc
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File 484:Periodical Abs Plustext 1986-2006/Aug W1

(c) 2006 ProQuest

File 613:PR Newswire 1999-2006/Aug 10
(c) 2006 PR Newswire Association Inc

File 813:PR Newswire 1987-1999/Apr 30

(c) 1999 PR Newswire Association Inc

File 141:Readers Guide 1983-2006/Jun

(c) 2006 The HW Wilson Co

File 239:Mathsci 1940-2006/Sep

(c) 2006 American Mathematical Society

File 370:Science 1996-1999/Jul W3

(c) 1999 AAAS

File 696:DIALOG Telecom. Newsletters 1995-2006/Aug 09

(c) 2006 Dialog

File 553:Wilson Bus. Abs. 1982-2006/Jul

(c) 2006 The HW Wilson Co

File 621:Gale Group New Prod.Annou.(R) 1985-2006/Aug 09

(c) 2006 The Gale Group

File 674:Computer News Fulltext 1989-2006/Jul W5 (c) 2006 IDG Communications

File 20:Dialog Global Reporter 1997-2006/Aug 10

(c) 2006 Dialog

17/9/1 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01842100 SUPPLIER NUMBER: 17523151

Separation anxiety. (application partitioning in client/server systems) (includes a related article on 4GLs that partition)(Tutorial)

Reed, Paul; Jackson, Steve

Database Programming & Design, p42(8)

Oct, 1995

DOCUMENT TYPE: Tutorial ISSN: 0895-4518 LANGUAGE: English

RECORD TYPE: Abstract

ABSTRACT: Application developers have long partitioned their applications in one way or another, but application partitioning is complicated in client/server systems, which distribute components onto two or more computers. The most popular client/server application partitioning scheme is the Gartner Group's model that divides the programmer's perspective of the application into three areas: presentation, function, and data management. The presentation layer is accommodated by creating a user interface, the function layer is often further subdivided, and the business logic layer is distributed among the client and server in five different ways. The model developed by Richard Hackathorn accommodates several different approaches based on locating most of the application's components on either the client or the server. Distributing process, data, and transactions across several physical environments increases complexity; other problems associated with client /server application partitioning are examined.

SPECIAL FEATURES: illustration; chart

DESCRIPTORS: Programming Tutorial; Technology Tutorial; Modeling;

Client/Server Architecture; Database Design

FILE SEGMENT: CD File 275

(Item 1 from file: 88) 21/3,K/1 DIALOG(R) File 88: Gale Group Business A.R.T.S. (c) 2006 The Gale Group. All rts. reserv.

SUPPLIER NUMBER: 12564659 02934512

Client/server OLTP arrives. (online transaction processing) (Cooperative Solutions Inc.'s Ellipse program development software) (Software Review) (reprint of an article that appeared in the Mar. 15, 1992 issue) (includes related articles on competing products and application size limits under Ellipse) (Evaluation)

Moad, Jeff Datamation, v38, n17, p136(5) August 15, 1992

DOCUMENT TYPE: Evaluation ISSN: 1062-8363 LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 1787 LINE COUNT: 00170

of network I/O. Its enhanced remote procedure calls (RPCs) allow Ellipse to transfer between client and server processes only the database records that are being changed rather than entire tables complements the production system by generating client/ server applications that take advantage of the system's transaction integrity features automatically. Ellipse developers use...

...programmers are never forced to think about coding either for transaction integrity or the client/ server architecture. Not only does the Ellipse development environment automatically generate code that makes use of the production system's integrity features it also automatically partitions the code between clients and servers .

Like most applications familiar to COBOL programmers, Ellipse applications are written as monolithic blocks of...

...the system administrator is asked to create what is called a resource map of the clients, servers and other physical elements on the network such as printers. Ellipse then associates logical processes with physical resources, effectively partitioning the application for the client / server environment automatically. Ellipse generates the interfaces to communications protocols and stored procedures for shared pieces of the application, such as database I/O, that should be run on the

Ellipse developers have access to other tools. They can view an outline of each application...

21/3,K/2 (Item 2 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.

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02911977 SUPPLIER NUMBER: 12023408

Client/server OLTP arrives! (Ellipse on-line transaction processing software from Cooperative Solutions Inc.)(includes related articles on competitive products and the size of applications that can run under Ellipse) (Software Review) (Cover Story: Transaction Processing) (Evaluation)

Moad, Jeff

Datamation, v38, n6, p26(5)

March 15, 1992

DOCUMENT TYPE: Evaluation ISSN: 1062-8363 LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 1696 LINE COUNT: 00168

... of network I/O. Its enhanced remote procedure calls (RPCs) allow Ellipse to transfer between **client** and server processes only the database records that are being changed rather than entire tables...

...to 10,000 records.

Ellipse's development environment complements the production system by generating client/ server applications that take advantage of the system's transaction integrity features automatically. Ellipse developers use...programmers are never forced to think about coding either for transaction integrity or the client/ server architecture. Not only does the Ellipse development environment automatically generate code that makes use of the production system's integrity features it also automatically partitions the code between clients and servers.

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Ellipse developers have access to other tools. They can view an outline of each application...

21/3,K/5 (Item 1 from file: 13)
DIALOG(R)File 13:BAMP

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00833094 Supplier Number: 98977120 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Virtual storage and real confusion: a big disconnect between what vendors
offer and what users want.

Computer Technology Review, v 22, n 11, p 1

November 2002

DOCUMENT TYPE: Journal ISSN: 0278-9647 (United States)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 1579

(USE FORMAT 7 OR 9 FOR FULLTEXT)

#### TEXT:

...shared block storage as a single volume. By separating storage management and allocation from the **physical** hardware and specific application servers, storage administrators can manage and control escalating storage costs.

#### Although...

...amorphous storage. They expect to see specific targets with addresses containing a target ID and **logical** unit number (LUN). In addition, some hosts will grab any LUN they can see, regardless...

...get around these limitations, block virtualization presents virtual layers that appear between the servers and **physical** storage devices. Actual blocks may be stored across different storage devices, while the storage administrators create virtual devices by virtually **partitioning** a single disk, or aggregating multiple disks to widen the storage pool. The **servers** no longer see (and try to grab) specific **physical** targets, but instead "discover" **logical** volumes for their exclusive use. The **servers** send their storage directly to the virtual volumes, happily thinking they are their direct-attached property. In fact, these **logical** volumes are highly flexible.

For example, Fujitsu Softek's Virtualization application, which is built on a DataCore engine, builds a transparent layer between the application server and storage devices. The virtualized layer shows the application server a set of devices optimized for its needs. Meanwhile the virtualization engine maps the virtual devices to actual physical devices. As is common with these types of virtualization schemes, the engine also uses advanced...

...passes for global file systems: proxy-like file systems that push data through a centralized **server**. These file systems process file requests from different operating systems and translate them into common...

...to manage files on virtual volumes, while in fact the files are scattered across different **physical** devices. Note that simply using a distributed file system does not equal virtualization—for example...

...IP network, where Storage Tank logs metadata information for file attributes and locations, and enables **file** locking.

## Storage Clusters

Storage clusters also benefit virtual file systems that allow the administrator to...

21/3,K/6 (Item 1 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2006 CMP Media, LLC. All rts. reserv.

01017698 CMP ACCESSION NUMBER: IWK19940131S0794

A DEFINING MOMENT? NOT REALLY

INFORMATIONWEEK, 1994, n 461, 48

PUBLICATION DATE: 940131

JOURNAL CODE: IWK LANGUAGE: English

RECORD TYPE: Fulltext

SECTION HEADING: CLIENT SERVER

WORD COUNT: 980

past 20 to 30 years.

Computer babble, a new form of psychobabble. The term "client-server" may be widely used but it has no definition, or perhaps it means different things...

...panic among those who think they are somehow deficient because they haven't yet implemented  ${f client}$  -  ${f server}$  .

A playpen for the new generation of IS professionals. What's next-cookies and milk, perhaps, or afternoon naps?

A redefinition of the mainframe- terminal paradigm, vis-a-vis server (mainframe, mini, server) and workstation (PC, terminal). Its big advantage is that users can amuse themselves with games when the server goes down, which is often.

Another person's brilliant idea of cost-savings that takes...

...needed a dictionary ourselves to understand them :

A processing model wherein a single application is **partitioned** between multiple processors (front end and back end), and, transparently to the user, the processors...

...complete the work as a single, unified task.

A system design paradigm that emphasizes the **mapping** or allocation of system- **logical** components to their system- **physical** components. In so doing, the " **physical** " separation of **clients** (user requests) and servers (all computing **resources**) is generally more pronounced.

The phrase implies multiple platforms and multiple applications working in concert...

(Item 1 from file: 275) 21/3,K/8 DIALOG(R) File 275: Gale Group Computer DB(TM) (c) 2006 The Gale Group. All rts. reserv.

(USE FORMAT 7 OR 9 FOR FULL TEXT) SUPPLIER NUMBER: 17840498 Database integration. (Technology Information)

Wong, William

Network VAR, v3, n11, p31(6)

Nov, 1995

ISSN: 1082-8818 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 3025 LINE COUNT: 00262

For example, reception of a Notes document can initiate processing based upon the document's contents . The same is true for documents added to a database through the replication feature.

 $\dots$ a person's name, telephone number, and photograph (as a bitmap). The logical view could map to two different databases: one with the textual data and the other with the photographic ...

...such as an employee number. However, this information might not necessarily be available in the logical view. The cross- mapping layer also manages the physical location of a database, which means an application might not know where the data is actually stored. The database has a logical name rather than a physicallocation name (a file server name and a file and directory name is an example of a physical -location name).

Because cross- mapping provides a way to partition information and database services, cross-mapping solutions are often found in three-tier, transaction processing...

...of managing and maintaining database access from the workstation, you can do it via cross- mapping . Workstations can access a single logical database presented by the cross- mapping support.

Open Horizon's (Belmont, Calif.) Connection is an example of a cross-mapping solution...

...Pittsburgh, Pa.). Encina provides the transaction processing support for an application while Connection provides the logical -to- physical database mapping.

Connection runs on a variety of server ...impose security restrictions and requirements, and provide coordinated access to logical (not physical) databases. Additionally, **servers** can be added, and database locations can be changed. All this can be done without...

21/3,K/9 (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01684952 SUPPLIER NUMBER: 15387914 (USE FORMAT 7 OR 9 FOR FULL TEXT) Get RADical. (rapid application development) (Tutorial)

Thompson, George A.

HP Professional, v8, n5, p30(6)

May, 1994

DOCUMENT TYPE: Tutorial ISSN: 0896-145X LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 2227 LINE COUNT: 00182

... provide a "thin client" graphical front-end to PowerHouse applications that run primarily on the **server** .

More importantly, the PowerHouse Series will eventually be subsumed by Cognos' Axiant, a second generation client- **server** development tool that supports RAD through application partitioning and iterative prototyping. Axiant will support Sybase/ Microsoft SQL **Server**, Oracle and Borland's InterBase through native APIs. Axiant applications also will support databases like...

...you develop your application, you can run it unchanged on Microsoft Windows, Motif or OpenLook clients . SuperNova can use a flat file , so you don't need a working database for your prototype. SuperNova also uses an object-oriented data dictionary with interfaces to C-ISAM and ASCII flat file databases, as well as Oracle, Sybase, Informix, Ingres and Teradata RDBMSs. HP's Allbase/SQL...

...on the ANSI/ISO three-schema architecture which separates an application's conceptual schema (a logical data model and the central application processing) from its external schema (end-user forms and reports) and its internal schema (a mapping of the data model to physical data storage). Uniface's 4GL also can trans-parently link HP's Allbase/SQL and...

 $\dots$ a variety of interfaces: Microsoft Windows, Motif, OpenLook Presentation Manager/Workplace Shell or character mode **terminals** .

A CULTURE OF CHANGE

BUT WHILE BUILDING PC GUIs puts the rapid in RAD, and application partitioning provides scalability, it's iterative prototyping and OOT that makes for good and fast applications...

21/3,K/10 (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01588227 SUPPLIER NUMBER: 13620603 (USE FORMAT 7 OR 9 FOR FULL TEXT)
AFS: NFS on steroids. (Carnegie Mellon University's Andrew File System; Sun
Microsystem Inc.'s Network File System) (includes related article about
the Open Software Foundation's Distributed File Service implementation of
AFS; another related article is about features of the Kerberos security

Cohen, David L.

LAN Technology, v9, n3, p51(9)

March, 1993

ISSN: 1042-4695 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 6620 LINE COUNT: 00524

... NFS are the nfsd and biod daemons or processes. The nfsd process runs on a **file** server and is basically a listener that fields client requests for file access. Multiple copies...

...identical environment. AFS must be incorporated into the kernel of all AFS file server and **client** machines.

On servers, AFS executables are installed in/usr/afs/bin and server configuration files are installed in /usr/afs/etc. AFS volumes on servers must reside on **partitions** associated with directories named/vicep?, where ? can be A through Z. **Logical** directories are **associated** with **physical partitions** in the/etc/fstab file. Since the/vicep? directions are not standard Unix directories, Transarc...

...version of the Unix fsck utility. (This tool checks file system consistency.) In the AFS **client**, executables and configuration files are installed in/usr/vice/etc. Every AFS **client** must have a cache set up in memory or on disk.

In AFS, a volume...

...of related files grouped together based on a disk space unit. Volumes cannot span multiple **partitions**. For management purposes, system administrators typically use a relatively small volume size to facilitate the replication and migration of files to another **partition**.

In AFS, servers and **clients** are grouped into administrative domains known as cells. Applications, executable files, and AFS databases are...

...to ensure uniqueness. Transarc's root volume's CellServDB file maintains the IP addresses. Individual client CellServDB files list the IP addresses and names of the database server machines in the...propagation of application and system software updates to replicate servers is handled by the Update Server Process. Transarc divides files servers within cells into four distinct roles. The System Control Machine maintains information for all file servers in a cell. At least one file server runs the four AFS database processes (Authentication, Protection, Volume Location, and Backup Server), but...

```
Items
               Description
Set
S1
               PARTITION?
        82260
S2
        30763
                LOGICAL
        45195
S3
                PHYSICAL
               SERVER? ?
S4
        58118
       503591
               CLIENT? ? OR NODE? ? OR TERMINAL? ? OR WORKSTATION? ?
S5
S6
       399007
               RESOURCE? ? OR FILE OR RECORD OR CONTENT? ?
S7
            0
                S4 () S1
S8
            7
              S5 () S1
S9
         1597
               (PROVIDE? ? OR PROVIDING OR PROVISION OR GRANT? ? OR GRANT-
            ING) (5N) S2
S10
          564 S2 (5N) (ACCESS OR AUTHORI? OR ALLOW? OR PERMISSION? ? OR -
            PERMIT OR PERMITTED OR PERMITTING )
S11
                (S2 OR S3) (5N) (MAP OR MAPS OR MAPPING)
S12
                (S2 OR S3) (5N) (CORRESPOND? OR RELATIONSHIP? ? OR CORRELA-
            TION? ? OR CORRELATE? ? OR CORRELATING OR ASSOCIATION? ? OR A-
             SSOCIATE? ? OR ASSOCIATING OR MATCH OR MATCHING )
S13
                S4 (3N) S1
                S5 (3N) S1
          231
S14
S15
         2713
              HYPERVISOR? ? OR VIRTUAL() MACHINE? ? OR VM OR VIRTUALIZATI-
S16
           0
                S14 (7N) (S11 OR S12)
S17
          146
                S5 (7N) (S11 OR S12)
S18
          0
                S1 AND S2 AND S3 AND S4 AND S5 AND (S11 OR S12)
? show files
File 347: JAPIO Dec 1976-2005/Dec (Updated 060404)
         (c) 2006 JPO & JAPIO
```

```
Set
        Items
                Description
       319054
                PARTITION?
S1
S2
       122558
                LOGICAL
S3
      2145044
                PHYSICAL
S4
       201765
                SERVER? ?
                CLIENT? ? OR NODE? ? OR TERMINAL? ? OR WORKSTATION? ?
S5
      1458666
                RESOURCE? ? OR FILE OR RECORD OR CONTENT? ?
S6
      3614295
S7
           23
                S4 () S1
S8
          221
                S5 () S1
                (PROVIDE? ? OR PROVIDING OR PROVISION OR GRANT? ? OR GRANT-
59
         3852
             ING) (5N) S2
                S2 (5N) (ACCESS OR AUTHORI? OR ALLOW? OR PERMISSION? ? OR -
S10
         2480
             PERMIT OR PERMITTED OR PERMITTING )
        21156
                (S2 OR S3) (5N) (MAP OR MAPS OR MAPPING)
S11
                 (S2 OR S3) (5N) (CORRESPOND? OR RELATIONSHIP? ? OR CORRELA-
S12
        62922
             TION? ? OR CORRELATE? ? OR CORRELATING OR ASSOCIATION? ? OR A-
             SSOCIATE? ? OR ASSOCIATING OR MATCH OR MATCHING )
          321
                S4 (3N) S1
S13
                S5 (3N) S1
S14
         2035
S15
        28782
                HYPERVISOR? ? OR VIRTUAL() MACHINE? ? OR VM OR VIRTUALIZATI-
             ON
            0
S16
                S8 (7N) (S11 OR S12)
                S14 (7N) (S11 OR S12)
S17
S18
            0
                S1 AND S2 AND S3 AND S4 AND S5 AND (S11 OR S12)
? show files
File
       8:Ei Compendex(R) 1970-2006/Jul W5
      (c) 2006 Elsevier Eng. Info. Inc.
35:Dissertation Abs Online 1861-2006/Jun
File
         (c) 2006 ProQuest Info&Learning
      65: Inside Conferences 1993-2006/Aug 10
File
         (c) 2006 BLDSC all rts. reserv.
       2:INSPEC 1898-2006/Jul W5
File
         (c) 2006 Institution of Electrical Engineers
      94:JICST-EPlus 1985-2006/Apr W5
File
         (c) 2006 Japan Science and Tech Corp(JST)
File 111:TGG Natl.Newspaper Index(SM) 1979-2006/Jul 28
         (c) 2006 The Gale Group
       6:NTIS 1964-2006/Jul W5
File
         (c) 2006 NTIS, Intl Cpyrght All Rights Res
File 144: Pascal 1973-2006/Jul W3
         (c) 2006 INIST/CNRS
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 2006 The Thomson Corp
      34:SciSearch(R) Cited Ref Sci 1990-2006/Jul W5
File
         (c) 2006 The Thomson Corp
      62:SPIN(R) 1975-2006/Apr W4
         (c) 2006 American Institute of Physics
      99:Wilson Appl. Sci & Tech Abs 1983-2006/Jul
File
         (c) 2006 The HW Wilson Co.
File
      95:TEME-Technology & Management 1989-2006/Aug W1
         (c) 2006 FIZ TECHNIK
File
      56: Computer and Information Systems Abstracts 1966-2006/Jul
         (c) 2006 CSA.
File
      57: Electronics & Communications Abstracts 1966-2006/Jul
         (c) 2006 CSA.
File 60:ANTE: Abstracts in New Tech & Engineer 1966-2006/Jul
         (c) 2006 CSA.
File 266:FEDRIP 2005/Dec
         Comp & dist by NTIS, Intl Copyright All Rights Res
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
File 438:Library Lit. & Info. Science 1984-2006/Jul
         (c) 2006 The HW Wilson Co
```

Set	Items	Description
S1	171	PARTITION?
S2	437	LOGICAL
s3	745	PHYSICAL
S4	7013	SERVER? ?
<b>S</b> 5	5676	CLIENT? ? OR NODE? ? OR TERMINAL? ? OR WORKSTATION? ?
S6	12248	RESOURCE? ? OR FILE OR RECORD OR CONTENT? ?
S7	5	S4 () S1
S8	0	S5 () S1
S9	16	(PROVIDE? ? OR PROVIDING OR PROVISION OR GRANT? ? OR GRANT-
	1I	IG) (5N) S2
S10	22	S2 (5N) (ACCESS OR AUTHORI? OR ALLOW? OR PERMISSION? ? OR -
	PI	RMIT OR PERMITTED OR PERMITTING )
S11	20	(S2 OR S3)(5N)(MAP OR MAPS OR MAPPING)
S12	13	(S2 OR S3) (5N) (CORRESPOND? OR RELATIONSHIP? ? OR CORRELA-
		ON? ? OR CORRELATE? ? OR CORRELATING OR ASSOCIATION? ? OR A-
	SS	SOCIATE? ? OR ASSOCIATING OR MATCH OR MATCHING )
S13	22	S4 (3N) S1
S14	1	S5 (3N) S1
S15	426	HYPERVISOR? ? OR VIRTUAL() MACHINE? ? OR VM OR VIRTUALIZATI-
	10	
S16	0	S1 AND S2 AND S3 AND S4 AND S5 AND (S11 OR S12)
File 2		SoSource 82-2006/Nov
	(c) 20	006 Info.Sources Inc

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